RCRA FACILITY INVESTIGATION (RFI) PHASE III WORK PLAN SAFETY-KLEEN (WICHITA) FACILITY WICHITA, KANSAS

PREPARED BY:



5777 CENTRAL AVENUE, SUITE 100 BOULDER, COLORADO 80301

FEBUARY 14, 2002



RCRA FACILITY INVESTIGATION (RFI) PHASE III WORK PLAN SAFETY-KLEEN (WICHITA) FACILITY WICHITA, KANSAS

2831

SSEK

· JUIST JE CHASS

MINC VILLE

BOWE

PCRA Co Na Perr PCRA a

3 4 3

John C. .; Senior E

35518

J. - C. 3

Pacitic Senior Di 1301 Ser Saite 355 Column

PREPARED BY:



CAMERON-COLE

5777 CENTRAL AVENUE, SUITE 100 BOULDER, COLORADO 80301

FEBUARY 14, 2002

TABLE OF CONTENTS

1.	INI	TRODUCTION	1
2.	SO	IL INVESTIGATION	3
	2.1.	Existing Data Review	
	2.2.	SCOPE OF WORK	4
3.	SUI	RFACE WATER INVESTIGATION	6
	3.1.	Existing Data Review	
	3.2.	SCOPE OF WORK	7
4.	GR	OUNDWATER INVESTIGATION	8
	4.1.	EXISTING DATA REVIEW 1. Site Geology And Groundwater Flow 2. Site Groundwater Quality Conditions	8
	4.1.	1. Site Geology And Groundwater Flow	8
•	4.1.	2. Site Groundwater Quality Conditions	9
	4.2.	SCOPE OF WORK	10
	4.2.	1. GeoProbe® Groundwater Sampling	10
	4.2	2. New Well Installation	10
		3. Monitoring Well Sampling	
5.	SCF	HEDULE AND REPORTING	13
6.	REI	FERENCES	14

LIST OF TABLES

Table 1	Soil Analytical Results, Inorganic Compounds, November 2001
Table 2	Volatile Organic Compounds Analyzed for in Method 8260
Table 3	Soil Analytical Results, Volatile Organic Compounds, November 2001
Table 4	Soil Analytical Results, Semi-volatile Organic Compounds, November 2001
Table 5	Sampling Details, Phase III RFI Work Plan
Table 6	Surface Water Analytical Results, November 2001
Table 7	Survey and Groundwater Data, April and November 2001
Table 8	Groundwater Analytical Results, General Chemistry, Metals and Dissolved Gases,
	November 2001
Table 9	Groundwater Analytical Results, Volatile Organic Compounds, November 2001
Table 10	Groundwater Analytical Results for GeoProbe® Water Samples, November 2001

LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Site Map
Figure 3	Soil Analytical Results for Organic Constituents, November 2001
Figure 4	Proposed Phase III RFI Soil and Water GeoProbe® Sample Locations
Figure 5	Surface Water Sample Analytical Results (ppb), November 2001
Figure 6	Groundwater Elevation Map for Alluvial Aquifer, November 11 and 12, 2001
Figure 7	Groundwater Monitoring Wells Analytical Data For VOCs - November 2001
Figure 8	Groundwater Analytical Results for VOCs, GeoProbe® Water Samples
	- November 2001
Figure 9	Revised RFI Schedule

LIST OF APPENDICES

Appendix A	Data Tables and Figures from Phase I of the RFI
Appendix B	Analytical Laboratory Data for November 2001
Appendix C	Well Logs from November, 2001

1. INTRODUCTION

This Phase III Work Plan is being submitted in response to discussions between Safety-Kleen (Wichita), Inc. (SK), Cameron-Cole, LLC, the United States Environmental Protection Agency (USEPA), and the Kansas Department of Health and Environment (KDHE). In a teleconference on January 9, 2002 and as confirmed in our letter dated January 10, 2002, these parties agreed that additional fieldwork is required before the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) for the SK Wichita facility (Figure 1) can be completed. Therefore, this work plan presents the proposed scope of work for a Phase III program of work to be performed as part of the RFI. The work plan was prepared by Cameron-Cole on behalf of Safety-Kleen and is based upon the findings of previous site investigations that have taken place since November 1999.

The Phase III program is a follow-up to work initiated with the revised Phase I RFI Work Plan dated October 14, 1999 and three supplemental stages of field work, which comprise the first two phases of the RFI. The Phase I Work Plan provides a complete description of investigation methodologies, standard operating procedures, and a revised quality assurance plan for the overall RFI. The Phase I Work Plan proposed a direct-push (or GeoProbe®) program of soil and groundwater sampling that was implemented at the site in Fall 1999. Figure 2 provides a site layout showing the initial Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). These areas were the primary basis of the Phase I RFI sampling plan. Due to the close proximity of many of these locations, the SWMUs and AOCs were grouped together to facilitate an efficient sampling program. An initial addendum to the RFI Work Plan, dated April 4, 2000, presented a brief review of the subsurface findings of the Phase I work and presented a plan for installing a groundwater monitoring well network at the facility. The well installation and sampling was completed in October 2000. These initial field investigations have indicated impacts to soil and groundwater at the site of primarily volatile organic compounds (VOCs) and limited amounts of inorganic constituents. Appendix A provides the key tables and figures summarizing the data from the first phase of the RFI, which were also summarized in the Revised Phase II RFI Work Plan.

A second addendum to the Phase I work, comprised of letters dated February 16 and March 30, 2001, proposed that an additional round of samples be collected from on-site and upgradient monitoring wells, and surface water samples be collected in the East Fork of Chisolm Creek. This work was completed in April 2001, with the exception of the installation of the off-site, upgradient monitoring wells that have been delayed due to access negotiations with Union Pacific Railroad. The analytical results were submitted KDHE and the USEPA in a May 24, 2001 letter. SK is still working on obtaining access to Union Pacific Railroad's (UPRR's) property for installation of the upgradient wells. SK is hopeful that an acceptable access agreement will be granted by UPRR prior to or during the implementation of the

Phase III field effort. The locations of the four proposed upgradient wells were identified in e-mail correspondence with the agencies on April 24, 2001. They are described in the RFI Phase II Work Plan and can be found in the figures provided in Appendix A of this work plan.

The Phase II RFI Work Plan (dated August 31, 2001 and modified by a letter dated October 15, 2001) was implemented in November 2001 and included surface water sampling, along with subsurface soil and groundwater sampling. The findings of that field effort are presented within this work plan and provide the basis of the proposed of work.

2. SOIL INVESTIGATION

2.1. Existing Data Review

As part of the initial field investigation identified in the Phase I RFI Work Plan, 44 soil borings were advanced with a GeoProbe[®] (i.e. direct-push method), logged and sampled at the SKW facility in November 1999. The borings were placed according to the locations of SWMUs and AOCs on the site, and other areas identified as potential areas for impacts based on historical information available for the site. The scope of this investigation is described in the Phase I Work Plan. Soil samples from each boring were analyzed to assess whether historical activities impacted the site subsurface media.

The following areas of concern were identified for further assessment based on the results of the Phase I work: (1) south of Building C near the loading ramp; (2) south of the processing area; (3) south of the former paint can burial pit; (4) east of Buildings J and K; and, (5) between Buildings I and J along the rail spur.

In the Phase II RFI, soil samples were collected and analyzed in these five areas for both metals and VOCs. Thirty-four (34) soil samples were analyzed for RCRA metals (arsenic, barium, cadmium, lead, mercury, selenium and silver). The results of these analyses are provided in Table 1, and the analytical laboratory reports are provided in Appendix B. Of the samples collected in November 2001, only one sample had a lead concentration above 1,000 milligrams per kilograms (mg/kg): B-63 at 0.5 feet (1,020 mg/kg). Only two soil samples had significantly elevated lead concentrations in the Phase I RFI conducted in November 1999: B-16 at 3 feet (1,560 mg/kg) and B-40 at 4 inches (7,800 mg/kg). The other concentrations of RCRA metals observed are not believed to be unusually elevated for an industrial area, and are not believed to pose a significant threat to human health or the environment.

Fifty-five (55) soil samples (excluding duplicate samples) were collected and analyzed for VOCs by USEPA SW846 Method 8260. Table 2 lists all the VOC compounds tested for in this gas chromatograph/mass spectrometer (GC/MS) scan. Only those constituents identified above the detection limit in at least one sample are listed in Table 3 with the concentrations reported. Most of the detections consisted of chlorinated VOCs such as tetrachloroethene (PCE), trichloroethene (TCE), and cis-1,2-dichloroethene (cis-DCE). The highest VOC detection was PCE reported at $28,000 \mu g/kg$ in sample B-46 at 2 feet below ground surface (bgs). Additionally, concentrations of PCE were detected in sample B-76 at 4 feet (610 $\mu g/kg$) and 16 feet (5,800 $\mu g/kg$). PCE was also observed at higher

concentrations in the northeastern corner of the site in B-70 at 8 feet (580 μ g/kg), and B-63 at 11 feet (11,000 μ g/kg). Other concentrations of VOCs were observed across the site and can be reviewed in Table 3 and are shown on Figure 3. The VOCs detected were primarily within the areas previously identified as potential source areas.

A GC/MS scan for semi-volatile compounds was conducted on eight soil samples (excluding duplicate results) by USEPA Method 8270C. The results are summarized on Figure 3 and in Table 4. Only bis 2-ethylhexyl phthalate (DEHP) was observed in sample B-68 at 16 feet (630 μ g/kg). DEHP was also observed in the Phase I RFI in this vicinity of the site in B-19 at 3 feet (9,400 μ g/kg), and B-18 at 3 feet (1,000 μ g/kg). Dimethyl phthalate was also observed in the Phase I RFI in sample B-19 at 3 feet (8,400 μ g/kg). The area impacted by the phthalates appears to be limited in extent, occurs well below the ground surface, and concentrations are below levels that are considered harmful to human health or the environment.

2.2. SCOPE OF WORK

The following describes a proposed scope of work related to subsurface soil impacts at the SK Wichita facility. The proposed sampling points referenced below are shown on Figure 4. The Phase III RFI scope of work for soil is as follows:

- The extent of the adsorbed PCE south of the loading dock warrants further investigation to assess the lateral extent (refer to samples from B-45, B-46 and B-47) of the adsorbed plume. Three additional borings will be advanced (B-98, B-99 and B-100), and two soil samples per boring will be collected from the vadose zone and analyzed for VOCs by USEPA Method 8260B. The primary objective of this task is to assess the extent of the PCE adsorbed plume. At this time, we anticipate that these samples will be analyzed in a short turn around time to assess whether up to three additional borings will be warranted in the general area. If the concentrations of the soil samples collected are below 25 μg/L PCE, then the area will be considered to be adequately assessed, and no contingency borings are warranted.
- The area south and downgradient of B-76, which lies adjacent to the southern property boundary, also warrants further investigation. This work will require access from El Paso, who currently owns the former Coastal-Derby refinery. Cameron-Cole has initiated communications with El Paso in the hope of gaining access for any necessary sampling or Phase III RFI activities. Once the scope of work is finalized, the formal request for access will be made in writing to El Paso. Cameron-Cole proposes to advance three initial borings (B-87, B-88, and B-89). Two unsaturated soil samples will be collected from each boring and analyzed for VOCs by USEPA Method 8260B.

The primary objective of this task is to assess the extent of PCE impacts in the vadose zone. These samples will be analyzed on a quick turn around time to assess whether contingency borings are warranted. Three contingency borings (B-101, B-102, and B-103) will be advanced, if needed, to assess the extent of PCE impacts in the soil and groundwater. Concentrations of PCE less than 25 μ g/kg in the soil will be considered adequate for an estimate of the lateral extent.

- Three borings will be advanced outside of the eastern fenceline, west of New York Street (B-93, B-94 and B-95) to assess the lateral extent of VOC impacts in the shallow fill in the northeastern corner of the site.
- One boring (B-96) will be placed southeast of the loading dock of Building J. The purpose of this boring location is to assess the possible source area for the VOCs observed in the groundwater sample B-79 in November 2002.
- One boring will be placed east of Building A (B-97) to assess the presence of VOCs in soil and groundwater in this area of the site and to address KDHE concerns.
- SK proposes to collect up to 15 soil samples to establish background concentrations for lead and arsenic for on-site and near-site soils. Since a small number of samples exceeded the Kansas Soil to Groundwater values identified for lead and arsenic, Cameron-Cole proposes to add dissolved lead and arsenic to the groundwater sampling program (Section 4.2.3). The background samples will be collected in the upper 4 inches of soil using either a clean sampling trowel or shovel. The decontamination procedures will follow those outlined in the Phase I Work Plan for other types of sampling devices. Approximately five to eight of the background samples will be collected east of New York Street, between Chisolm Creek and the roadway. Additional samples will either be collected along the property perimeter, on adjacent properties (depending on access), and/or the east side of Chisolm Creek. The final locations will be decided in the field with input from the agencies, if present.

This work will be conducted using GeoProbe® equipment and methods consistent with those previously used on site. Many of these borings will be advanced to the groundwater table for collection of water samples as described in Section 4.2.1. Each of the borings will be continuously sampled and logged in accordance with the Unified Soil Classification System. Table 5 lists each of the proposed boring locations, sampling depths and analytical parameters, and indicates which borings will also be utilized for collection of groundwater samples. All soil boring and sampling procedures will follow those described in Section 5 and Appendix G of the SKW Phase I RFI Work Plan dated October 19, 1999.

3. SURFACE WATER INVESTIGATION

3.1. EXISTING DATA REVIEW

Five surface water samples were collected from the East Fork of Chisolm Creek in April 2001 and November 2001 (Figure 5). Chisolm Creek flows from north to south and is located just east of the facility. The five surface water samples were collected to assess whether groundwater impacts at the SKW facility may affect surface water quality in Chisolm Creek. The results of the recent surface water sampling event are summarized in Table 6.

The East Fork of Chisolm Creek is concrete lined in places, but the length of creek that was sampled near the facility was unlined. The sample that was collected furthest upstream of SKW facility, and hydraulically upgradient with respect to the direction of groundwater flow (SK-SW-5), had no detections in November 2001. However, in April 2001, SK-SW-5 had the highest concentration of TCE at 4.7 micrograms per liter (µg/L).

During November 2001, the sample collected at SK-SW-4 also had no detections. Very low concentrations of chlorinated VOCs were reported in samples SK-SW-3 and SK-SW-1. Sample SK-SW-2 had seven VOC detections ranging from 1.1 μ g/L to 23 μ g/L.

The two sets of sampling results vary considerably. The results from April 2001 suggest an upstream TCE source area. The November 2001 analytical results do not suggest an upstream TCE source. Additionally, data were collected in November 2001 to assess the relationship of the groundwater below the site with Chisolm Creek. The interpreted potentiometric map, including surveyed surface water elevations, is provided in Figure 6. The data suggest that the groundwater that flows beneath the SK facility is in hydraulic contact with the creek and therefore, may discharge potentially impacted groundwater to the surface water body at given times throughout the year. This hydraulic data, combined with the surface water sampling results suggest that impacted groundwater is likely flowing into Chisolm Creek east of the SK facility.

3.2. SCOPE OF WORK

At least two additional surface water sampling events will be conducted in locations as close to the original five sampling points as possible. The initial event will be conducted during the drilling program. The second event will be conducted at least one month after completion of the drilling program, but prior to completion of the RFI. The samples will be analyzed for VOCs using USEPA Method 8260B. The surface water elevations will be measured during each sampling event at sampling points SK-SW-2, 3 and 4 to provide ongoing stream elevation data.

4. GROUNDWATER INVESTIGATION

4.1. EXISTING DATA REVIEW

4.1.1. SITE GEOLOGY AND GROUNDWATER FLOW

A total of thirteen on-site monitoring wells are located on the SKW facility (Figure 2). Geologic information collected during the installation of the wells indicates that the site is underlain by 10 to 17 feet of gravelly clay, underlain by eight to 18 feet of sand. Below the sand lies a clay layer, approximately two to six feet thick, which pinches out in the southwestern corner of the site. The clay is generally underlain by another eight to nine feet of sand, and one to nine feet of weathered bedrock. In the southwestern corner of the site where the clay lens is not present, the gravelly clay extends to approximately six feet bgs, and the underlying sand unit is approximately 19 feet thick. Bedrock beneath the site is the Wellington Shale, which is encountered at depths ranging from 35 to 43 feet bgs. The water table occurs at about 13 to 17 feet bgs.

Of the 13 on-site monitoring wells, six are shallow wells (SK-1S through SK-6S) screened across the water table and extending into approximately the upper seven feet of the aquifer. Wells HRI-03 and RSCI-1 are fully penetrating wells that were installed prior to the RFI work. The five deep wells (SK-1D, SK-2D, SK-3D, SK-4D and SK-5D) are screened over approximately the lower five feet of the unconsolidated aquifer, just above the Wellington Shale. Well pairs SK-3S/D, SK-4S/D and SK-5S/D were positioned in locations near or downgradient of areas believed to be potential source areas of historic groundwater impacts. In addition, the SK-3S/D well pair replaced an older well, HRI-02, which was abandoned due to the nature of its construction. The well pairs SK-1S/D and SK-2S/D and a single shallow well (SK-4S) were installed in downgradient locations to monitor the groundwater quality migrating off-site. The shallow well (SK-6S) was positioned to help evaluate potential impacts from historical site activities in the northeastern portion of the site. Survey coordinates and elevations for the existing wells are listed in Table 7, along with the gauging data. Well logs are included in Appendix C.

Two additional shallow wells (SK-10S and SK-11S) were installed east and downgradient of the site, between the facility and Chisolm Creek (Figure 6). These wells were added to the monitoring well sampling and gauging activities in November 2001.

Water levels were measured in the on-site wells, the two downgradient offsite wells, and four UPRR wells (MW-10, MW-11, MW-14, and WND-32) within a 24-hour period on November 11 and 12, 2001. The shallow water level data (excluding the fully penetrating wells) were used to produce the contoured groundwater elevation map presented on Figure 6. The groundwater flow direction across the site is to the southeast with a gradient of about 0.0025 ft/ft. The groundwater elevation, flow direction and gradient are consistent with the more regional potentiometric surface map produced by Camp Dresser & McKee (CDM) in March 2001 (CDM 2001) as part of the North Industrial Corridor (NIC) investigation, and previous maps generated from data collected on the SK facility.

4.1.2. SITE GROUNDWATER QUALITY CONDITIONS

Groundwater samples were recently collected and analyzed from the on-site monitoring wells and selected upgradient wells in November 2001. Analytical data from these sampling events are presented in Tables 8 and 9, and analytical results for the organic constituents are presented on Figure 7.

The available data indicate that both shallow and deep groundwater beneath the SKW site is impacted by VOCs. The constituents in the shallow zone appear to reflect impacts to groundwater associated with releases from the SKW site, as identified in the soil quality results. However, the nature of the impacts in the deeper groundwater is distinct from those in the shallow. The absence of the same suite of VOCs in the deep zone as those detected in shallow wells suggests that constituent migration is absent or limited through the clayey zone below the site. Moreover, the occurrence of TCE and cis 1,2-DCE in monitoring wells upgradient of the site (CDM, 2000) suggests an upgradient source as the explanation for these constituents in the deep wells at the site. A more complete evaluation of these data is pending the collection and analysis of groundwater samples from monitoring wells proposed on Union Pacific Railroad property immediately north of the site and will be presented in the RFI report. (As previously described, the installation of these wells has been delayed due to property access negotiations.)

Groundwater data collected using temporary GeoProbe® points are presented in Table 10 and shown on Figure 8. Samples collected at the groundwater surface in B-45, 46 and 47 primarily contained concentrations of PCE, TCA and TCE. PCE was detected at 1,300 μg/L in B-46, which is the boring where the highest PCE concentration in soil was detected. Sample B-50, south of the Hot Rooms in Building D, also contained concentrations of PCE, cis 1,2-DCE, TCE and TCA at concentrations up to 1,700 μg/L. Elevated concentrations of PCE (160 and 490 μg/L) were observed in groundwater samples B-78 and B-79, respectively, which may suggest a potential nearby ongoing source area. Although other sample points contain detections of VOCs, none appear to indicate additional areas of concern.

4.2. SCOPE OF WORK

4.2.1. GEOPROBE® GROUNDWATER SAMPLING

To further assess possible localized areas of shallow subsurface impacts onsite, GeoProbe® points will be advanced into the uppermost groundwater in the shallow alluvial aquifer in select locations. Sample collection methods will minimize potential cross-contamination from the soils above. These samples may not be reproducible due to the method of collection, but they are intended for use as a screening tool for gross estimates of the presence or absence of dissolved impacts to the alluvial aquifer. Samples will be collected in this manner from the following sample points as indicated on Figure 4.

The borings placed south of the loading dock of Building C (including any contingency borings drilled) will be advanced into the groundwater surface, and groundwater samples will be collected using the same methods used previously in November 2001. Likewise, the three initial borings drilled south of B-76 and any contingency borings drilled will have groundwater samples collected near the groundwater surface. Two additional GeoProbe® borings will be advanced between the SK-3 and SK-4 well pairs to assess the extent of groundwater impacts downgradient of the loading dock of Building C. Three additional points (B-93, B-94 and B-95) will be advanced outside of the property fenceline along New York Avenue to assess potential impacts of chlorinated VOCs in the shallow groundwater east of the northeastern corner of the site. One water sample will be collected in boring B-96 to assess this area as a potential source area for concentrations of chlorinated solvents previously observed in B-79. A groundwater sample will also be obtained from boring B-97, east of Building A, to assess the extent of impacts observed in samples B-21 and B-50. The groundwater samples from each of these areas will be submitted to the analytical laboratory for analysis of VOCs by Method 8260B. Table 5 outlines the borings, the sample types and depths, and the analytical parameters to be tested in each sample.

4.2.2. New Well Installation

One new monitoring well (SK-B92) will be completed as a shallow well near the former B-46, south of the loading dock of Building C. The well will be 1-inch, flush-mounted in diameter and installed similar to the GeoProbe[®] well installed at SK-B68. The total depth of this well will be approximately 20-25 feet bgs.

Proposed upgradient well locations on Union Pacific Railroad property are provided in Appendix A, on Figure 6 from the Phase II RFI Work Plan. CC proposes to install three additional deep upgradient

wells (SK-7D, SK-8D, and SK-9D) and one additional shallow upgradient well (SK-8S) to monitor groundwater before it reaches the SKW facility. The installation of the wells is contingent on completion of an access agreement with UPRR, which is under negotiation.

The locations of these wells were chosen to create well pairs with the existing UPRR shallow upgradient monitoring wells. The wells will be installed, developed, purged and sampled according to the protocols described in the Phase I RFI Work Plan dated October 1999, including the standard operating procedures (SOP) outlined in Appendix G.

4.2.3. MONITORING WELL SAMPLING

Upon completion of the new monitoring wells, a full round of gauging and sampling will occur. The field methods to be utilized are described in the approved Phase I Work Plan and Addendum. The samples will be analyzed for the same parameters as the October 2000 and the April 2001 sampling events. The approved QA/QC procedures, methods, SOPs, and percentages are provided in the previous Phase I Work Plan and Addendum. The analytical parameters for groundwater testing are restated below:

- VOCs
- Methane and Dissolved gases
- Total and Dissolved Iron
- Total Nitrogen
- Total and Dissolved Manganese
- Dissolved Calcium
- Dissolved Lead
- Dissolved Magnesium

- Dissolved Potassium
- Dissolved Chloride
- Dissolved Bicarbonate
- Dissolved Sulfate
- Dissolved Sodium
- Total Organic Carbon
- Dissolved Arsenic

Dissolved lead and arsenic have been added to this list of parameters to address concerns regarding soil samples containing elevated lead and arsenic concentrations. A small number of these concentrations exceed the Kansas Soil to Groundwater Tier 2 values for those two constituents. By adding dissolved lead and arsenic to the list of parameters, SK can assess whether lead is indeed leaching from these soils into the groundwater system.

Ferrous iron will also be added to the list of field parameters to be monitored. A field kit has been identified which will measure representative concentrations of ferrous iron at the time of sampling. Also, dissolved oxygen will be monitored using a down-hole device.

The following wells will be sampled during the Phase III RFI:

- UPRR Wells: MW-10, MW-11, MW-14, MW-32, MW-32D, SK-7D*,SK-8S*, SK-8D*and SK-9D*
- SK Facility Wells: HRI-03, RSC-1, SK-1S, SK-1D, SK-2S, SK-2D, SK-3S, SK-3D, SK-4S, SK-4D, SK-5S, SK-5D, SK-6S, SK-10S, SK-11S, SK-B68 and SK-B92*
- * These wells will be sampled if installed during the Phase III investigation.

5. SCHEDULE AND REPORTING

The field investigation activities described herein will be initiated within four to six weeks following receipt of agency approval of the Work Plan, contingent upon the availability of the appropriate subcontractors. The work proposed for UPRR, the Coastal Derby Refinery, and City of Wichita property will clearly be contingent upon obtaining the appropriate access by the time the field effort begins. If access issues delay portions of the scope of work, then it may require multiple mobilizations to complete the work plan. The soil boring and monitoring well installation and the related sampling are anticipated to take approximately two weeks to complete.

As discussed in the Phase I RFI Work Plan submitted in October 1999, this RFI is being conducted in stages to assess the extent of impacts to soil and groundwater in an efficient and rational manner. The scope of work for each subsequent stage of the investigation relies on prior data obtained from earlier investigations. Cameron-Cole plans to include the data collected from the Phase III Work Plan in the RFI report, which is tentatively scheduled for completion in draft form in June 2002. A revised RFI schedule is attached presented in Figure 9.

6. REFERENCES

- CDM 2000. City of Wichita, North Industrial Corridor Site, Phase 1/1A Technical Memorandum. February 2000.
- CDM 2001. Draft North Industrial Corridor Site March, 2001 Water Level Map and Data,

 (Memorandum with enclosures from CDM to the City of Wichita and the Kansas Department of Health and Environment, April 10, 2001.)
- Environmental Decision Group, Inc. 1999. RCRA Facility Investigation, Phase I Work Plan EPA Identification No. KSD007246846, Safety-Kleen (Wichita), Inc. Facility, 2549 North New York Avenue, Wichita, Kansas
- Cameron-Cole, LLC, 2001. RCRA Facility Investigation, Phase II Work Plan

 EPA Identification No. KSD007246846, Safety-Kleen (Wichita), Inc. Facility, 2549 North New

 York Avenue, Wichita, Kansas and associated Letter from Cameron-Cole, LLC dated October

 15, 2001 amending the scope of work, and USEPA's letter dated November 6, 2001 amending
 the Revised Phase II RFI Work Plan

Table 1 Soil Analytical Results Inorganic Compounds November 2001 Safety-Kleen (Wichita) Facility Wichita, KS

Location	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)
B-54 (4)	39.6	511	4.3	207	549	0.11	< 1.3	3.1
B-54 (17)	2.9	67.3	0.72	22.1	44.2	< 0.033	< 1.3	< 1
B-60 (1)	1.9	30.2	34.8	3.3	466	< 0.033	< 1.3	< 1
B-60 (3)	7.2	272	< 0.5	20.4	10.6	< 0.033	< 1.3	< 1
B-60 (16)	1.1	19.8	< 0.5	2	2.3	< 0.033	< 1.3	< 1
B-61 (0.5)	10.1	310	4.6	65.8	542	0.12	< 1.3	< 1
B-61 (4)	6.1	347	6.7	33.6	219	0.41	< 1.3	< 1
B-61 (18)	1.2	15.4	< 0.5	1.1	1.8	< 0.033	< 1.3	< 1
B-62 (0.5)	6.8	456	21.8	47.2	142	0.046	< 1.3	<1
B-62 (5)	5.4	201	< 0.5	28.8	12.3	< 0.033	< 1.3	< 1
B-62 (17)	2.2	43.2	< 0.5	11.8	8	< 0.033	< 1.3	< 1
B-63 (0.5)	11	226	2.4	51	1020	< 0.033	< 1.3	< 1
B-63 (11)	4.1	178	< 0.5	19.8	69.3	< 0.033	< 1.3	< 1
B-63 (19)	1.5	22.5	< 0.5	1.6	2.3	< 0.033	< 1.3	< 1
B-64 (0.5)	12.4	59.8	3.2	17.3	170	0.16	2.8	< 1
B-64 (3)	9.4	126	< 0.5	18.8	10.8	< 0.033	< 1.3	< 1
B-64 (16)	1.5	52.5	< 0.5	3.9	2.7	< 0.033	< 1.3	< 1
B-65 (0.5)	11.8	109	5	13.6	308	0.18	2.7	< 1
B-65 (3)	5.5	180	1.5	21.3	39.8	< 0.033	< 1.3	< 1
B-65 (16)	1.7	34.2	< 0.5	4.5	3.3	< 0.033	< 1.3	< 1
B-66 (0.5)	92.3	143	< 0.5	31	156	0.12	5.6	< 1
B-66 (3)	5.7	155	1.5	15.4	69.3	< 0.033	< 1.3	< 1
B-66 (16)	1.5	37.9	< 0.5	4.2	3.3	< 0.033	< 1.3	< 1
B-67 (0.5)	15	93.8	4	17.4	49.5	0.053	4.9	< 1
B-67 (3)	11.2	115	3.8	15	299	< 0.033	1.9	< 1
B-67 (16)	2.1	55.6	< 0.5	11.9	6.1	< 0.033	< 1.3	<1
B-68 (4)	5.5	165	< 0.5	21.3	10.4	< 0.033	< 1.3	< 1
B-68 (16)	< 1	30.1	< 0.5	2.4	2.2	< 0.033	< 1.3	< 1
B-68 (16) *	1.1	18.6	< 0.5	3.1	2.4	< 0.033	< 1.3	< 1
B-69 (3)	5.5	190	< 0.5	23	11.3	< 0.033	< 1.3	< 1
B-69 (15)	2,2	34.5	< 0.5	7.5	4.6	< 0.033	< 1.3	< 1
B-70 (0.5)	8.4	168	3	44.7	105	0.31	< 1.3	< 1
B-70 (8)	4.9	192	< 0.5	18.6	26.3	0.035	< 1.3	< 1
B-70 (18)	< 1	16.6	< 0.5	1.4	1.5	< 0.033	< 1.3	< 1



Volatile Organic Compounds Analyzed for in Method 8260 S-K Wichita Facility Wichita, Kansas

Parameter Name	Method	Units
1,1,1,2-Tetrachloroethane	8260B	ppb
1,1,1-Trichloroethane	8260B	ppb
1,1,2,2-Tetrachloroethane	8260B	ppb
1,1,2-Trichloroethane	8260B	ppb
1,1-Dichloroethane	8260B	ppb
1,1-Dichloroethene	8260B	ppb
1,1-Dichloropropene	8260B	ppb
1,2,3-Trichlorobenzene	8260B	ppb
1,2,3-Trichloropropane	8260B	ppb
1,2,4-Trichlorobenzene	8260B	ppb
1,2,4-Trimethylbenzene	8260B	ppb
1,2-Dibromo-3-chloropropane	8260B	ppb
1,2-Dibromoethane	8260B	ppb
1,2-Dichlorobenzene	8260B	ppb
1,2-Dichloroethane	8260B	ppb
1,2-Dichloropropane	8260B	ppb
1,3,5-Trimethylbenzene	8260B	ppb
1,3-Dichlorobenzene	8260B	ppb
1,3-Dichloropropane	8260B	ppb
1,4-Dichlorobenzene	8260B	ppb
2,2-Dichloropropane	8260B	ppb
2-Chlorotoluene	8260B	ppb
4-Chlorotoluene	8260B	ppb
Benzene	8260B	ppb
Bromobenzene	8260B	ppb
Bromochloromethane	8260B	ppb
Bromodichloromethane	8260B	ppb
Bromoform	8260B	ppb
Bromomethane	8260B	ppb

Parameter Name	Method	Units
Carbon tetrachloride	8260B	ppb
Chlorobenzene	8260B	
Chlorodibromomethane	8260B	ppb
Chloroethane	8260B	ppb
Chloroform	8260B	ppb
Chloromethane	8260B	ppb
cis-1,2-Dichloroethene	8260B	ppb
Dibromomethane	8260B	ppb
Dichlorodifluoromethane		ppb
Ethylbenzene	8260B	ppb
Hexachlorobutadiene	8260B	ppb
Isopropylbenzene	8260B	ppb
m-Xylene & p-Xylene	8260B	ppb
	8260B	ppb
Methylene chloride	8260B	ppb
n-Butylbenzene	8260B	ppb
n-Propylbenzene	8260B	ppb
Naphthalene	8260B	ppb
o-Xylene	8260B	ppb
p-Isopropyltoluene	8260B	ppb
sec-Butylbenzene	8260B	ppb
Styrene	8260B	ppb
tert-Butylbenzene	8260B	ppb
Tetrachloroethene	8260B	ppb
Toluene	8260B	ppb
trans-1,2-Dichloroethene	8260B	ppb
Trichloroethene	8260B	ppb
Trichlorofluoromethane	8260B	ppb
Vinyl chloride	8260B	ppb

ppb - parts per billion (or μ g/L for water and μ g/kg for soil)

Table 3
Soil Analytical Results
Volatile Organic Compounds
November 2001
Safety-Kleen (Wichita) Facility
Wichita, KS

										• •	Temita	, 110										
					N.			/	$\overline{}$		$\overline{}$	$\overline{}$	7	$\overline{}$		/	$\overline{}$	$\overline{}$	$\overline{}$		7/	_
			Adoroethane	A.2.4.Tring	ibenter	ethylhethethe is-1,2-thic	hioroethene Fittyl	oste /	Athendene Athender	43 Pent	,ene	thentene Harri	/ _{ne /}	/ /	APAROMETE SEC. But	Atheritene Reft But	Appendence Letrach	araethene Ta	Hale La	nethen!		
		/ j.č	nort in	intol . The	ethyl on	ethyll/ rick	hioroether Ethyl	senity 5	ither.	8. d.	heatene h. Prop	ibenit h	thatene or	Hene Copie	Dyltol	itherit	ville Hill	araetii.	Hene 2.Di	chloro	roettene Vinyl chloride	
			1.Dic	A Artit	S. S. Tritt	13.01	Ethy	Soprov	4 ylent	n.But?	A.Prop	. \ \ \phi_{3P}	/ 8 ^T	Fobil	oc.Bu	, KBI	atrach	10	12.00	cichic	Jinyl C	
		4/	1	13.	3,	eis /		·/	W.		*/			4/	%/	re.	~~/		Kalls	~/		
Location	1	/ 																				
<u>Units</u> B-45 (4)	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg]	
B-45 (14)	< 25	< 5 < 25	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	200	< 5	< 2.5	< 5	< 5	}	
B-46 (2)	< 1200	< 1200	< 25	< 25	< 12	< 25	< 25	< 12	< 25	< 25	< 25	< 12	< 25	< 25	< 25	490	< 25	< 12	< 25	< 25	1	
B-46 (13)	< 25	< 25	< 25	< 1200	< 590 < 12	< 1200	< 1200	< 590	< 1200	< 1200	< 1200	< 590	< 1200	 	< 1200	28000	< 1200	< 590	< 1200	< 1200		
B-47 (3)	< 25	< 25	< 25	< 25	< 12	< 25	< 25	< 12	< 25	< 25	< 25	< 12	< 25	< 25	< 25	690	< 25	< 12	< 25	< 25		
B-47 (14)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 25 < 5	< 12 < 2.5	< 25	< 25	< 25	< 12	< 25	< 25	< 25	540	< 25	< 12	26	< 25	r	
3-48 (3)	< 5	16	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5 < 5	< 5	< 5	< 2.5	< 5	< 5	< 5	37	< 5	< 2.5	< 5	< 5	' ' '	
B-48 (14)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5 < 5	< 5 < 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	8.4	l ·	
B-49 (4)	< 5	< 5	< 5	< 5	2.9	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5 < 2.5	< 5	< 5	< 5	71	< 5	< 2.5	8.4	< 5	1	
B-49 (15)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5 < 5	< 5 < 5	< 5 < 5	33	< 5	< 2.5	6.8	< 5	[, '	
B-50 (4)	< 25	< 25	< 25	< 25	29	< 25	< 25	< 12	< 25	< 25	< 25	< 12	< 25	< 25	< 25	270	< 5	< 2.5	< 5	< 5	j	
B-50 (4) DUP	< 25	< 25	< 25	< 25	29	< 25	< 25	< 12	< 25	< 25	< 25	< 12	< 25	< 25	< 25	370 550	< 25	< 12	81	< 25	1	
3-50 (15)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 25 < 5	< 12 < 2.5	120	< 25)	
B-50 (15) DUP	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	59	< 5	< 2.5	< 5 8.3	< 5 < 5		
B-51 (4)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	1	
3-51 (15)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	4	
B-52 (4)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	, ⁾	
3-52 (15)	< 250	< 250	2400	510	< 120	< 250	< 250	< 120	400	370	310	< 120	< 250	< 250	< 250	< 250	< 250	< 120	< 250	< 250		
B-53 (5)	< 25	< 25	< 25	< 25	< 12	< 25	< 25	< 12	< 25	< 25	< 25	< 12	< 25	< 25	< 25	< 25	< 25	< 12	200	< 25		
3-53 (17)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	.	
3-54 (4)	< 5	< 5	< 5	< 5	5.1	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	160	< 5	< 2.5	11	< 5	-	
3-54 (17)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5		
3-55 (3)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	27	< 5	< 2.5	15	< 5		
3-55 (17)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	† !	
3-56 (3)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	68	< 5	< 2.5	< 5	< 5		
3-56 (16)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	7.2	< 5	< 2.5	< 5	< 5		
3-57 (4)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	ļ	
3-57 (15)	< 5	< 5	< 5	< 5	< 2.5	35	< 5	150	< 5	< 5	< 5	50	< 5	< 5	< 5	· < 5	< 5	< 2.5	< 5	< 5		
3-58 (4) -58 (16)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	16	< 5	< 2.5	< 5	< 5		
3-58 (16)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5		
-59 (3)	< 5	< 5	70	< 5	< 2.5	46	11	27	8.6	30	< 5	6.1	8.1	18	12	< 5	6.5	< 2.5	< 5	< 5		
-59 (15)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5		
-60 (1) -60 (3)	< 5 < 5	5.2	< 5	< 5	23	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	12	44	6.6	6.9	9.7	}	
-60 (3) -60 (16)	< 5 < 5	< 5 < 5	< 5 < 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5		
G-61 (0.5)	< 5	< 5 < 5		< 5	< 2.5	< 5	< 5	3	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	8.8	· < 5	< 2.5	< 5	< 5	·	
-01 (0.2)	_ ^3	<u> </u>	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5		

Table 3
Soil Analytical Results
Volatile Organic Compounds
November 2001
Safety-Kleen (Wichita) Facility
Wichita, KS

										***	ciiica, i										i
		1,3,1,Trieth	A. A. Aliente	to thate	1,3 5 Trines	sylventene ise 1, Tien	are there e	tenford tenford	pertene s	P Tylene I Tylene I	nature of the state of the stat	periene Aspir	deter of the	Prisotron Prisotron	Hollens Sec. Physical Physical Sec. Physical Physical Sec. Physical Phys	petrette de la	denter la	Total Total	ege Arabet Artic	Trichlar Trichlar	gettere the the transfer
ocation	(, ,	/	- 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	32	< 5	< 2.5	6.2	< 5	
3-61 (4)	< 5	< 5 < 5	< 5 < 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	, . '+
3-61 (18)	< 5 < 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	
3-62 (0.5)	< 5	<u> </u>	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	
3-62 (5)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	·<5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	1
3-62 (17) 3-63 (0.5)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	24	< 5	< 2.5	< 5	< 5	!
3-63 (11)	1000	< 490	< 490	< 490	< 240	< 490	< 490	< 240	< 490	< 490	< 490	< 240	< 490	< 490	< 490	11000	< 490	< 240	590	< 490	
3-63 (11) 3-63 (19)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	
3-68 (4)	< 5	23	6	< 5	6.4	19	< 5	110	< 5	< 5	< 5	32	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	;
B-69 (3)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	
B-69 (3) DUP	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	9.4	< 5	< 2.5	< 5	< 5	
B-69 (15)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	
B-70 (8)	< 25	< 25	< 25	< 25	< 12	< 25	< 25	< 12	< 25	< 25	< 25	< 12	< 25	< 25	< 25	580	< 25	< 12	25	< 25	
B-70 (18)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	1
B-76 (4)	< 25	< 25	< 25	< 25	< 12	< 25	< 25	< 12	< 25	< 25	< 25	< 12	< 25	< 25	< 25	610	< 25	< 12	< 25	< 25	1
B-76 (16)	< 250	< 250	< 250	< 250	< 120	< 250	< 250	< 120	< 250	< 250	< 250	< 120	< 250	< 250	< 250	5800	< 250	< 120	< 250	< 250	1
B-76 (16) DUP	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	1
B-77 (5)	< 5	6.3	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5 < 5	1
B-77 (16)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	1
B-80 (1)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5 < 5	< 5	
B-80 (15)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5 < 2.5	< 5	< 5	1
B-80 (15) DUP	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	+	< 5	< 5	1
B-83 (1)	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 2.5	< 5	< 5	- 1
B-45 (4)	< 5	< 5	< 5	< 5	< 2.6	< 5	< 5	< 2.6	< 5	< 5	< 5	< 2.6	< 5	< 5	< 5	200	1 < 3	1 ~ 2.0	1 -2	1 - 3	4

Table 4 Soil Analytical Results Semi - Volatile Organic Compounds November 2001 Safety-Kleen (Wichita) Facility Wichita, KS

Location	/	censofther Ac	e naphthyles	Anthracence Peri	Ma Arthrace	He Bente	e Hudranti Hoffunfanti	Rent Rent	ede River and River	Lette Mittalat	Chrysette Thires	Je harthra	cede Phila	ate hindratificate	Findrene	idenoid 2,3	ge gathiratere	Renalitrate	Pyrene
B-48 (3)	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	ĺ
B-48 (14)	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	
B-49 (4)	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	
B-49 (15)	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	
B-50 (4)	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	
B-50 (4) *	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	
B-50 (15)	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	İ
B-50 (15) *	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	
B-68 (4)	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	
B-68 (16)	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	630	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	
B-68 (16) *	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	650	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	< 330	

Concentrations reported micrograms per kilogram or $\mu g/kg$ (ppb) Detections are BOLDED

^{* =} Duplicate sample

Table 5 Sampling Details Phase III RFI Work Plan S-K Wichita Facility Wichita, Kansas

Boring ID		Surface Samples	Ge	oprobe Soil Sam	pling Depths	S	Soil Sample Ana	alyses	Geoprobe Groundwater Sampling	Geoprobe Groundwater Sample Analyses	Surface Wate Analyses
	Document Description	0 to 4 inches	Sample with Highest PID Reading in Fill	Sample with Highest PID <10 ft bgs	Bottom 2 feet of Vadose Zone	VOCs ¹	Total Lead ²	Total Arsenic ²	Upper 5 feet of Water Table	VOCs ¹	VOCs ¹
B-84	South of Building C Loading Ramp			X					1		
B-85	South of Building C Loading Ramp			X	X	X			X	X	
B-86	South of Building C Loading Ramp			X	<u>X</u>	X			X	X	
B-87	Adjacent to Southern Property Boundary South of B-76			X		X			' X	X	
B-88	Adjacent to Southern Property Boundary South of B-76			X	<u>X</u>	X			X	X	
B-89	Adjacent to Southern Property Boundary South of B-76			$\frac{X}{X}$	X	X			X	X	
B-90	Between SK-4 and SK-3 well pairs				X	X		· · · · · · · · · · · · · · · · · · ·	X	X	
B-91	Between SK-4 and SK-3 well pairs				· · · · · · · · · · · · · · · · · · ·				X	X	
SK-B92	Near Former B-46, South of Building C Loading Ramp +					<u> </u>		·	X	X	
B-93	East of Property Along New York St.		v	X	<u>X</u> .	X					
B-94	East of Property Along New York St.		X X		X	X			X	X	
B-95	East of Property Along New York St				X	X			X	X	
B-96	Near Southeast Corner of Building J Loading Dock		X		X	X			X	X	
B-97	East of Building A			X	X	X			, X	X	
B-98	Contingency Boring Near Building C Loading Ramp *			X	X	X			X	X	
B-99	Contingency Boring Near Building C Loading Ramp *			X	X	X	<u>.</u>		X	X	
B-100	Contingency Boring Near Building C Loading Ramp *			X	<u> </u>	X			' X	X	
B-101	Contingency Boring Near Former B-76 *			X	X	X			, X	X	
B-102	Contingency Boring Near Former B-76 *			X	X	X			X	X	
3-103	Contingency Boring Near Former B-76 *			X	X	X			X	X	
SK-SW-1	North of 21st Street East Fork Chisolm Creek			X	X	X			II X	X	
SK-SW-2	Southeast of Site East Fork Chisolm Creek										X
SK-SW-3	East of Southern Site Boundary East Fork Chisolm Creek										X
SK-SW-4	East of the Northeast Corner of the Site East Fork Chisolm Creek										X
SK-SW-5	Upgradient of the Site/ East of I-35 East Fork Chisolm Creek	 		·							X
SS-1	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**										X
SS-2	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
SS-3	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
SS-4	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X			<u> </u>		X	X			
S-5	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
S-6	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
S-7	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
S-9	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
S-10	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
S-11	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
S-12	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X			
	East of New York Street and/or Along Perimeter of Site and/or Near Site Property**	X					X	X		-	
	1 Total Breet almoi Along Fermicier of Site and/or Near Site Property**	X					X	X			

Notes:

^{*} Final location to be determined during the field event based on observations and initial field findings.

^{**} Background sample locations to be finalized in the field.

^{&#}x27;+ Well will be sampled with other wells in the groundwater monitoring network for same analytical parameters.

¹ Samples were analyzed by USEPA SW 846 Method 8260B

² Samples were analyzed by USEPA SW846 Method 6010-TR (ICP trace)

Table 6
Surface Water Analytical Results
Volatile Organic Compounds
November 2001
Safety-Kleen (Wichita) Facility
Wichita, KS

ocation									
	Method	Units	1,1,1-Trichloroethane	1,1-Dichloroethane	Benzene	ois 12 Di 11			
SK-SW-1	8260B	ug/L	1.2	<1	< 1	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl chloride
SK-SW-2	8260B	ug/L	3.2	1.2		11	1	4.3	< 1
SK-SW-3	8260B	ug/L	<1		3.3	23	2.1	4.4	
SK-SW-4	8260B	 		<1	< 1	1.6	1.7	<1	1.1
		ug/L	<1	<1	< 1	< 1		< 1	< 1
SK-SW-5	8260B	ug/L	<1	<1	< 1	 	< 1	< 1	< 1
SK-SW-5*	8260B	ug/L	<1	<1		<1	< 1	< 1	< 1
= Duplicate san		<u>' </u>	 !		< 1	<1	<1	<1	

Survey and Groundwater Data for Monitoring Wells April and November 2001 Safety-Kleen (Wichita), Inc. Wichita, Kansas

	Survey Coor	dinates			Apri	1 25, 2001	November 12, 2001			
Well Identification	Northing	Easting	Top of Casing (feet msl)	Casing Diameter (inches)	Depth to Water (feet)	Groundwater Elevation (feet msl)	Depth to Water (feet)	Groundwater Elevation (feet msl)		
SK-1S	1701435.13	1654150.42	1315.43	2	16.44	1298.99	17.02			
SK-1D	1701433.03	1654158.09	1315.61	2	16.09	1299.52	16.55	1299.06		
SK-2S	1701352.32	1653643.2	1313.51	2	14.25	1299.26	14.72	1298.79		
SK-2D	1701352.84	1653651.39	1313.47	2	14.16	1299.31	14.51	1298.96		
SK-3S	1701358.64	1653453.58	1313.33	2	13.65	1299.68	14.20	1299.13		
SK-3D	1701358.2	165459.78	1313.37	2	13.85	1299.52	14.17	1299.17		
SK-4S	1701330.43	1653252.27	1312.8	2	12.87	1299.93	13.45	1299.35		
SK-4D	1701322.33	1653254.10	1312.84	2	NM		13.49	1299.35		
SK-5S	1701423.92	1653527.32	1313.49	2	13.83	1299.66	14.42	1299.07		
SK-5D	1701423.85	1653532.62	1313.65	2	13.98	1299.67	14.42	1299.23		
SK-6S	1701608.68	1654227.91	1316.98	2	17.55	1299.43	18.20	1298.78		
SK-10S	1701327.72	1654179.32	1316.64	2	NM		19.01	1297.63		
SK-11S	1701114.53	1654067.02	1316.78	2	NM		19.13	1297.65		
SK-68B	1701525.19	1653521.19	1314.08	1	NM		17.90	1296.18		
RSCI-1	1701409.55	1653990.47	1315.49	4	16.11	1299.38	16.47	1299.02		
WND-32	1701737.09	1653110.92	1318.20	2	17.50	1300.70	18.17	1300.03		
HRI-03	1701323.78	1653072.28	1312.46	4	12.56	1299.90	12.99	1299.47		
MW-10	1701907.56	1653522.30	1318.11	2	17.21	1300.90	18.00	1300.11		
MW-11	1701719.78	1653520.73	1316.57	2	16.33	1300.24	17.02	1299,55		
MW-14	1701812.20	1653352.03	1317.74	2	17.11	1300.63	. 17.82	1299.92		

Measurements collected with a 24-hour period. feet msl = feet mean sea level

NM = Depth to water not measured

Table 8
Groundwater Analytical Results,
General Chemistry, Metals and Dissolved Gases,
November 2001
Safety-Kleen (Wichita) Facility
Wichita, KS

	General Chemistry Parameters									<u> </u>										
1				Gene	ral Chemist								Dissolved Gases							
Location	Alkalinity, Bicarbonate	Alkalinity, Carbonate	Alkalinity, Total	Ammonia (as N)	Chloride	Nitrogen, Nitrite and Nitrate	Sulfate	Total Dissolved Solids	Total Organic Carbon	Calcium (Dissolved)	Iron (Dissolved)	Iron (Total)	Magnesium (Dissolved)	Manganese (Dissolved)	Manganese (Total)	Potassium (Dissolved)	Sodium (Dissolved)	Ethane	Ethene	Methane
(Units)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(μg/l)	(μg/l)	(μg/l)
UPRR Wells														•						
MW-10	448	< 5	448	0.3	39.9	0.15	< 5	940	3.5	94.8	2.2	391	26.3	1.2	7.1	3.3	70.6	0.6	< 0.5	R
MW-11	257	< 5	257	0.13	10.2	0.46	203	595	3.6	135	1.7	93	17.1	0.86	1.4	3.2	24.3	< 0.5	< 0.5	R
MW-11 *	263	< 5	263	0.15	12.1	0.45	164	655	3.5	132	1.9	77.6	16.7	0.78	1.4	3.4	23.2	< 0.5	< 0.5	R
MW-14	496	< 5	496	0.37	43.4	0.18	40.7	540	4.5	136	8.4	396	36.1	3.1	6.2	3	51.6	< 0.5	< 0.5	R
WND-32	310	< 5	310	< 0.1	68.7	6.3	138	925	2.5	124	< 0.1	42.4	30.6	3.3J	1.4J	5.6	78.8	< 0.5	< 0.5	1.5
WND-32D	324	< 5	324	< 0.1	80.1	3.1	231	1070	2.4	136	< 0.1	55.3	55.8	0.08	1.3	< 3	52.6	< 0.5	< 0.5	2.6
SK Facility Wells							-						•							
HRI-03	338	< 5	338	< 0.1	73	2.2	215	798	2.6	133	< 0.1	0.33	52.3	0.28	0.34	< 3	50.5	< 0.5	< 0.5	2.9
RSC-1	337	< 5	337	< 0.1	79.1	3.2	231	858	1.9	143	< 0.1	4.2	57.1	0.16	0.5	< 3	53.3	< 0.5	< 0.5	1.1
SK-10S	338	< 5	338	0.39	80.5	0.35	142	680	4.6	92.8	< 0.1	259J	41.3	2.6	9.8	3	75.2	2.2	< 0.5	27
SK-10S *	332	< 5	332	0.44	80.2	0.42	160	840	5.4	94.8	< 0.1	430J	42.1	2.7	12.2	3.4	77.4	2.3	< 0.5	27
SK-11S	351	< 5	351	< 0.1	61.2	1.7	193	704	5	66	< 0.1	0.2	21.6	0.75J	0.65J	< 3	166	< 0.5	< 0.5	3.1
SK-1D	269	< 5	269	< 0.1	50.6	1.7	443	1000	3.5	164	< 0.1	0.35	62.9	0.056	0.069	< 3	44.9	< 0.5	< 0.5	0.92
SK-1D *	270	< 5	270	< 0.1	50.9	1.7	419	994	4	163	< 0.1	0.46	63.9	0.055	0.067	< 3	45.6	< 0.5	< 0.5	0.98
SK-1S	260	< 5	260	< 0.1	55.5	1.7	315	1040	1.9	. 131	< 0.1	56.6	50	0.02	0.54	< 3	43.7	< 0.5	< 0.5	0.7
SK-2D	347	< 5	347	< 0.1	56	3.3	287	895	16.9	141	< 0.1	3.3	56.8	0.61	0.87	< 3	50.1	< 0.5	< 0.5	1.7
SK-2S	423	< 5	423	0.13	80.8	< 0.1	132	825	5.2	134	0.13	385	35.7	2.5	10.5	3.3	72.2	< 0.5	< 0.5	R
SK-3D	285	< 5	285	< 0.1	52	5.1	189	649	20	106	< 0.1	11.3	40.5	0.33	0.55	< 3	44.6	< 0.5	< 0.5	0.88
SK-3S	282	< 5	282	< 0.1	53.4	5.8	167	1000	5.9	102	< 0.1	21.5J	35.8	0.94	1.1	3.3	46.8	< 0.5	< 0.5	7.4
SK-3S *	277	< 5	277	< 0.1	57.8	5.9	138	666	2.8	102	< 0.1	11.6J	35.8	0.94	1 +	3.9	47.8	< 0.5	< 0.5	9.9
SK-4D	338	< 5	338	< 0.1	65.1	3.1	190	767	4.2	120	< 0.1	0.5	45.7	1.4	1.5	3	50	< 0.5	< 0.5	1.9
SK-4S	386	< 5	386	< 0.1	36.9	1.3	190	1030	2.9	138	< 0.1	0.85	38.3	1.8	1.9	3.3	43.1	< 0.5	< 0.5	4.3
SK-5D	318	< 5	318	< 0.1	74.4	3.6	234	770	18.9	119	< 0.1	1.8	49	0.42	0.51	< 3	45.7	< 0.5	< 0.5	1.2
SK-5S	481	< 5	481	0.24	115	< 0.1	68	910	4.6	128	2.6	35.6	35.5	2.6	3.5	3.9	90.6	< 0.5	< 0.5	R
SK-6S	410	< 5	410	< 0.1	56.1	< 0.1	93.2	1400	2.9	99.8	< 0.1	6.9	36.3	2.7	2.8	< 3	82.2	< 0.5	< 0.5	73
SK-B68	482	< 5	482	0.27	65.6	0.36	42.8	658	2.6	127	0.84	14.2	36.4	1.1	1.2	3.1	54.4	< 0.5	< 0.5	700
SK-B68 *	485	< 5	485	0.25	65.5	0.31	48.3	674	2.7	127	0.8	10.8	36.6	1.1	1.2	3.1	55.5	< 0.5	< 0.5	NA

Notes:

^{* =} Duplicate Sample

J = Estimated Value

R = Rejected Value from the Data Validation Process

Table 9 Groundwater Analytical Results, Volatile Organic Compounds November 2001 Safety-Kleen (Wichita) Facility Wichita, KS

												Wichit	a, No							ŕ			
		Tricing of the Park	A. Dichonochane	L. Dichorothone	L.3.c	D. Primethythenicone	Benne	Toon tetraching	Chandra Chis.	1.2. Dichloroethene	Chimberson 1	Topropyllonene	Thene & Livene	rethylene chloride	ouozeogu Gugy	ary populariene	Naphthalene	A. Maho	C. Burnhenene	en allone llene	Tower, I'm	J. Dichlorethone	Tring or the state of the state
UPRR Well		1	1	1	1	1	1		1		1	1	1	r				ı	1	T		· · · · · · · · · · · · · · · · · · ·	
MW-10	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 80	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 20	< 40	< 40
MW-11	<1	<1	< 1	1.6	< 1	<1	<1	<1	<1	<1	1.4	< 2	<1	<1	2	< 1UJ	< 1	2.5	< 1	<1	< 0.5	<1	<1
MW-11 *	< 1	<1	<1	<1	<1	<1	<1	<1	1.5	<1	1.9	<2	<1	5.4	2.7	5.9J	<1	2.4	<1	<1	< 0.5	<1	< 1
MW-14	< 40	< 40	< 40	<40	< 40	< 40	<40	< 40	< 40	< 40	< 40	< 80	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 20	< 40	< 40
WND-32 WND-32D	< 1 < 2	<1	<1	<1 <2	<1	<1	6.6	32 < 2	1.1	<1	<1	<2	< 2	<1 <2	<1	<1	<1	<1	<1	<1	< 0.5	110	< 2
SK Facility		\2	\2	\2	1 -2	~2	1 ~2	\2	17	\2	\2	\4	\2	~2		<2	\2	\2	<2	<2	\1	110	
HRI-03	< 4	<4	<4	< 4	< 4	< 4	6.4	< 4	21	< 4	< 4	< 8	< 4	< 4	< 4	<4	< 4	< 4	< 4	< 4	< 2	120	< 4
RSC-1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	,<1	< 0.5	4.9	<1
SK-10S	< 4	11	< 4	< 4	< 4	<4	< 4	<4	110	<4	< 4	< 8	<4	<4	< 4	<4	<4	<4	56	<4	<2	9.7	51
SK-10S *	< 4	14	< 4	< 4	< 4	< 4	< 4	< 4	140	<4	< 4	< 8	<4	<4	< 4	< 4	< 4	< 4	67	< 4	< 2	12	59
SK-11S	8.3	2	1.4	< 1	< 1	<1	< 1	< 1	32	< 1	< 1	< 2	<1	<1	<1	<1	< 1	< 1	3.9	< 1	< 0.5	16	<1
SK-1D	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 1	< 1	< 1	<1	< 1	<1	< 1	< 1	< 0.5	< 1	< 1
SK-1D *	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	<1	< 1	< 2	< 1	<1	< 1	< 1	< 1	<1	< 1	< 1	< 0.5	< 1	< 1
SK-1S	< 1	< 1	< 1	< 1	< 1	< 1	<1	< 1	3.3	<1	< 1	< 2	<1	<1	< 1	< 1	< 1	< 1	24	< 1	< 0.5	2.1	< 1
SK-2D	< 4	< 4	< 4	< 4	< 4	<4	<4	< 4	39	< 4	<4	< 8	<4	<4	< 4	<4	< 4	< 4	< 4	< 4	< 2	210	< 4
SK-2S	38	17	< 8	< 8	< 8	< 8	< 8	< 8	260	< 8	< 8	< 16	< 8	< 8	< 8	< 8	< 8	< 8	180	< 8	<4	100	< 8
SK-3D	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	11	< 2	< 2	<4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 1	69	< 2
SK-3S	< 2	< 2	< 2	55	13	< 2	< 2	< 2	6.7	33	2.1	120	< 2	< 2	6.7	3.8	44	< 2	8	87	< 1	35	< 2
SK-3S *	< 5	< 5	< 5	57	14	< 5	< 5	< 5	7.1	32	< 5	120	< 5	< 5	6.2	< 5	44	< 5	9.2	93	< 2.5	35	< 5
SK-4D	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	11	< 2	< 2	<4	< 2	< 2	< 2	< 2	< 2	< 2	3.5	< 2	< 1	63	< 2
SK-4S	11	7.8	3.6	< 2	< 2	< 2	< 2	< 2	45	< 2	< 2	< 4	< 2	< 2	< 2	< 2	< 2	< 2	76	< 2	< 1	12	< 2
SK-5D	< 4	<4	< 4	< 4	< 4	<4	< 4	< 4	20	<4	<4	< 8	<4	<4	< 4	<4	<4	< 4	< 4	<4	< 2	120	< 4
SK-5S	24	10	< 4	< 4	< 4	< 4	< 4	<4	120	< 4	< 4	< 8	<4	<4	< 4	<4	< 4	<4	230	< 4	< 2	90	< 4
SK-6S	<1	2.8	< 1	< 1	< 1	<1	< 1	<1	<1	<1	<1	<2	<1	<1	<1	<1	< 1	< 1	2	<1	< 0.5	< 1	<1
SK-B68	20J	2.7J	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	89J	< 2.5	< 2.5	< 5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	5.9J	< 2.5	< 1.2	8.3J	< 2.5
SK-B68 *	120J	18J	< 10	< 10	< 10	< 10	< 10	< 10	370J	< 10	< 10	< 20	< 10	< 10	< 10	< 10	< 10	< 10	26J	< 10	< 5	40J	< 10

Notes: * = Duplicate Samples
Constituent concentrations reported mircrograms per liter (μ g/l)

J = Estimated Value

UJ = Estimated Non-Detect

Table 10 Groundwater Analytical Results for Geoprobe Water Samples, November 2001 Safety-Kleen (Wichita) Facility

•	
Wichita,	KS

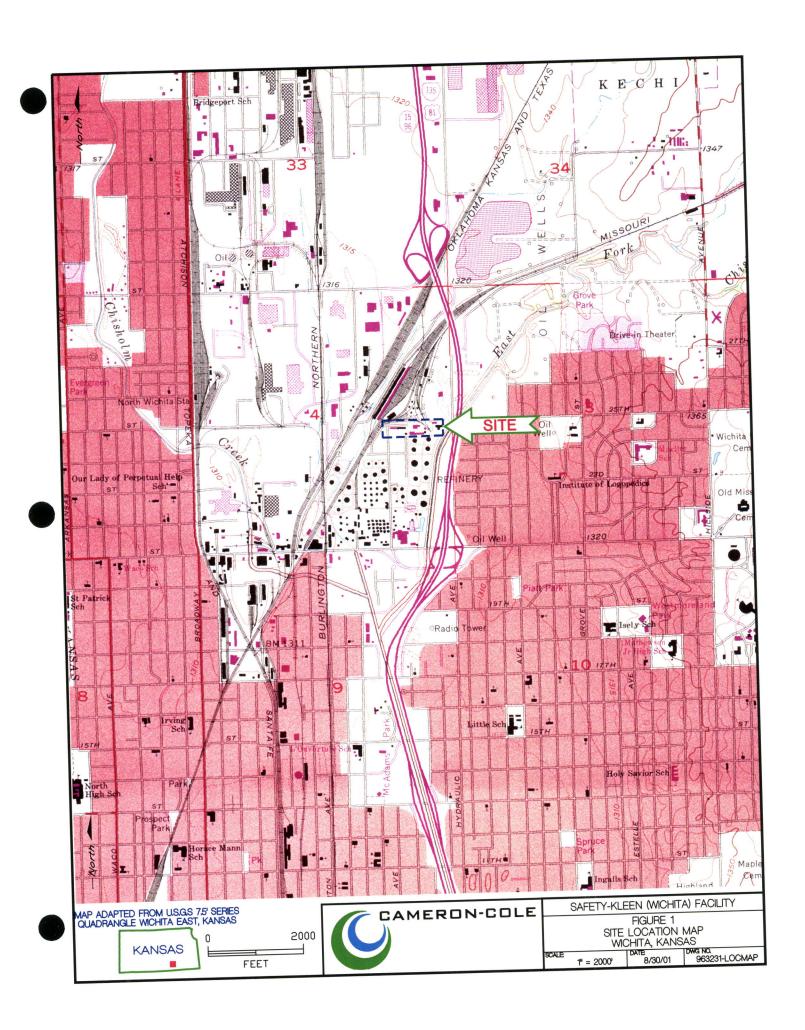
											VV ICIIII								,			,	,
Localin	^{1,1,1} ,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	Charachane 1,1.Dick.	A.I.Dice.	Tri. 1.2.4	Tri 135	B. B.	Genom t	Che Choride	of the state of th	Ethy.	tspron.	n'Aliene		ne chloride	Superior of the superior of th	Asp.	and and a second	Sec. But	Perion, Company	To To	angue de la companya	Trichio	Ciny the Ciny
B-45-15 feet	47	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 27	< 13	< 13	< 13	< 13	< 13	< 13	300	< 13	< 6.7	20	< 13
B-46-17 feet	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 40	< 80	< 40	< 40	< 40	< 40	< 40	< 40	1300	< 40	< 20	40	< 40
B-47-16 feet	23	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	13	< 2.5	< 2.5	< 2.5	< 5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	7,1	< 2.5	< 1.2	47	< 2.5
B-48-18 feet	6.3	4	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	14	< 2.5	< 2.5	< 5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	44	< 2.5	< 1.2	10	< 2.5
B-50-18 feet	340	< 80	< 80	< 80	< 80	< 80	< 80	< 80	1700	< 80	< 80	< 160	< 80	< 80	< 80	< 80	< 80	< 80	1700	< 80	< 40	960	< 80
B-56-18 feet	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	<1	<1	<1	< 2	<1	<1	< 1	< 1	< 1	<1	55	< 1	< 0.5	8.9J	< 1
B-56-18 feet*	2.4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	<1	<1	<1	< 2	<1	<1	< 1	<1	< 1	<1	40	< 1	< 0.5	1.6J	< 1
B-60-18 feet	< 10	45	< 10	23	< 10	< 10	< 10	< 10	< 10	77	< 10	590	< 10	< 10	< 10	< 10	290	< 10	< 10	< 10	< 5	< 10	< 10
B-63-20 feet	9	2.5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 4	< 2	< 2	< 2	< 2	< 2	< 2	32	< 2	< 1	< 2	< 2
B-68-19 feet	39	< 5	< 5	< 5	< 5	< 5	< 5	< 5	140	10	< 5	54	< 5	< 5	< 5	< 5	21	< 5	29	8.2	< 2.5	22	< 5
B-69-18 feet	3.2	8	< 1	< 1	<1	< 1	< 1	< 1	3.8	< 1	a	< 2	< 1	< 1	< 1	< 1	< 1	< 1	1.5	< 1	< 0.5	2	39
B-71-20 feet	< 1	2	< 1	< 1	< 1	< 1	< 1	<1	23	< 1	< 1	< 1	< 1	<1	<1	< 1	< 1	< 1	24	< 1	< 1	3	14
B-72-20 feet	< 1	5	< 1	< 1	< 1	< 1	< 1	< 1	<1	<1	<1	<1	<1	<1	< 1	<1	< 1	<1	<1	< 1	<1	< 1	< 1
B-73-20 feet	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.8	< 1	< 1	<1	< 1	< 1	<1	< 1	< 1	< 1	<1	< 1	< 1	< 1	< 1
B-74-20 feet	32	12	< 1	< 1	< 1	< 1	<1	<1	110	< 1	< 1	< 1	5.4	<1	< 1	< 1	< 1	< 1	25	<1	<1	26	< 1
B-75-40 feet	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	<1	< 1	< 1	< 1	< 1	< 1	< 1	<1	< 1	< 1	1.4	< 1
B-75-22 feet	< 1	< 1	< 1	< 1	< 1	8.4	<1	< 1	<1	< 1	< 1	< 1	< 1	<1	< 1	< 1	<1	< 1	< 1	< 1	< 1	< 1	< 1
B-77-19 feet	2.7	8.9	< 1	< 1	< 1	< 1	< 1	< 1	<1	< 1	< 1	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.1	< 0.5	< 1	<1
B-78-20 feet	< 5	26	< 5	< 5	< 5	< 5	< 5	< 5	70	< 5	< 5	< 10	< 5	< 5	< 5	< 5	< 5	< 5	160	< 5	< 2.5	28	260
B-79-20 feet	< 29	< 29	< 29	< 29	< 29	< 29	< 29	< 29	430	< 29	< 29	< 57	< 29	< 29	< 29	< 29	< 29	< 29	490	< 29	< 14	48	80
B-80-17 feet	< 1	33	<1	<1	<1	1.6	<1	<1	2.1	1.7	<1	14	<1	<1	<1	<1	1.8	<1	<1	<1	3	<1	< 1
B-81-20 feet	2.7	38	<1	<1	<1	<1	<1	<1	6.5	<1	<1	< 2	<1	<1	<1	<1	<1	<1	42	<1	< 0.5	15	< 1
B-82-18 feet	< 1	6.8	<1	<1	<1	<1	<1	<1	4.3	<1	<1	<2	<1	<1	<1	<1	<1	<1	15	<1	< 0.5	7.1	< 1
B-83-17 feet	< 20	44	< 20	< 20	< 20	< 20	< 20	< 20	< 20	120	< 20	310	< 20	< 20	< 20	< 20	190	< 20	< 20	39	< 10	< 20	< 20

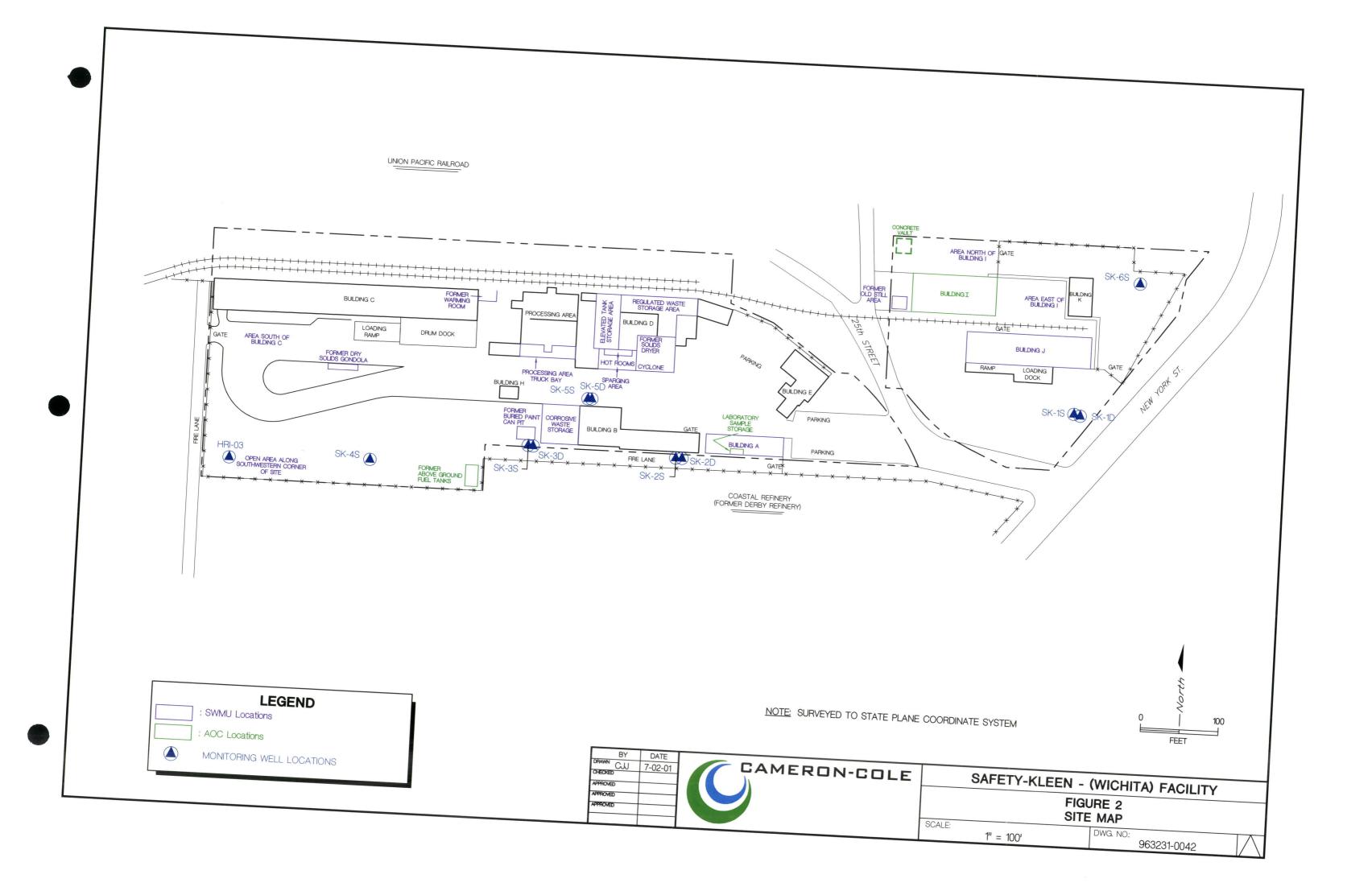
Notes:

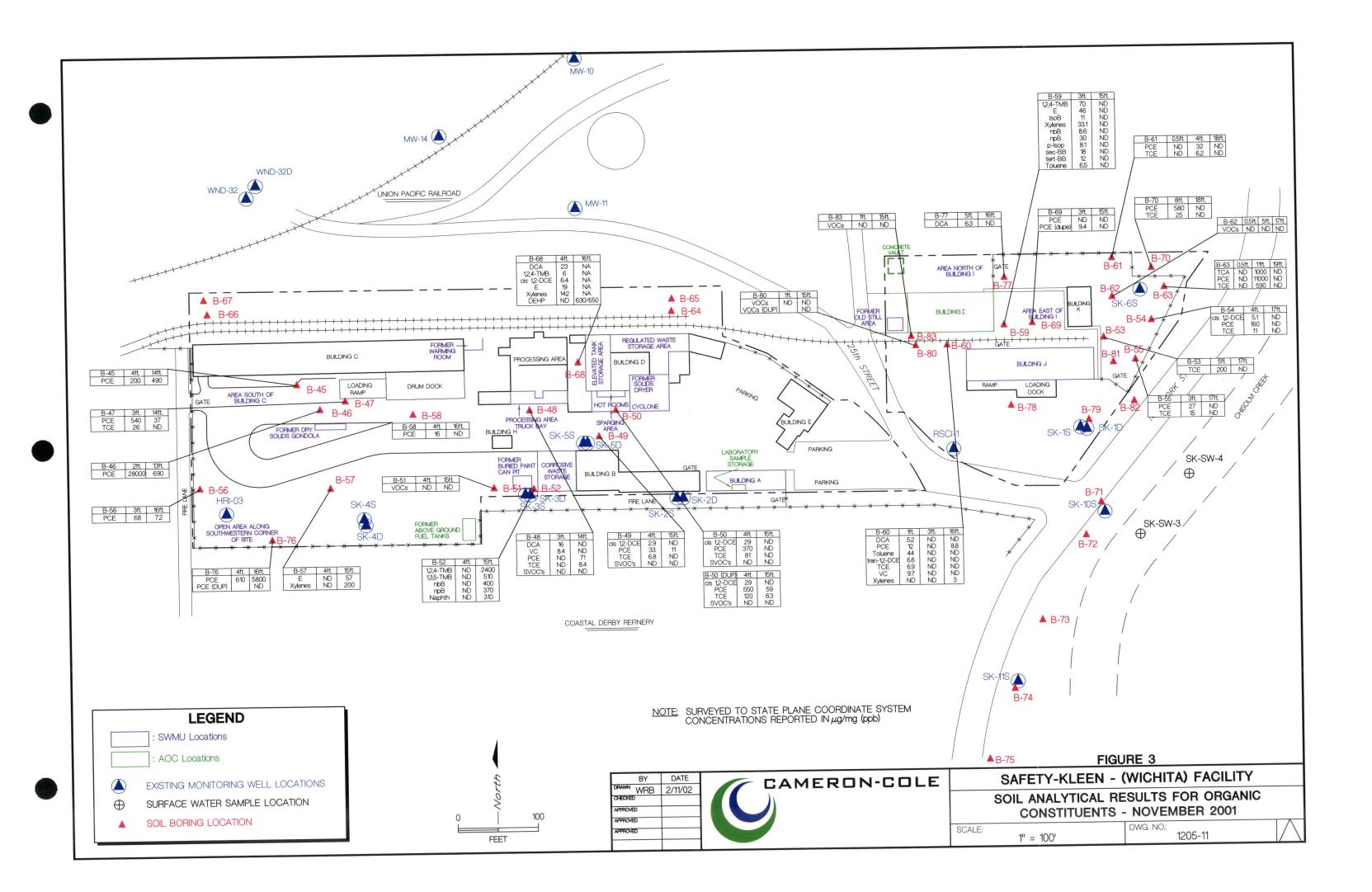
Concentrations reported in micrograms per liter $(\mu g/l)$ * = Duplicate sample

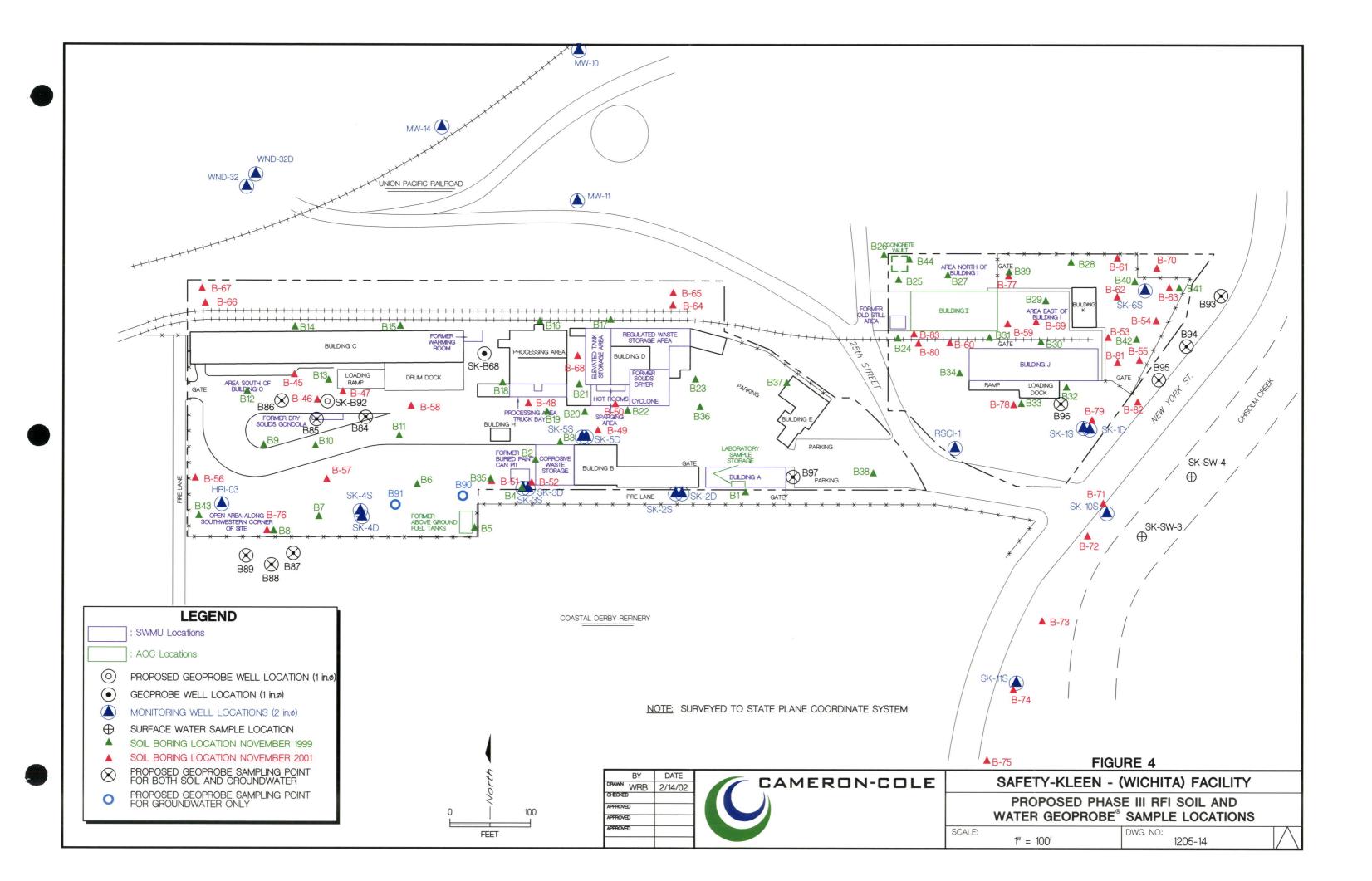
Bold = constituent above detection limit

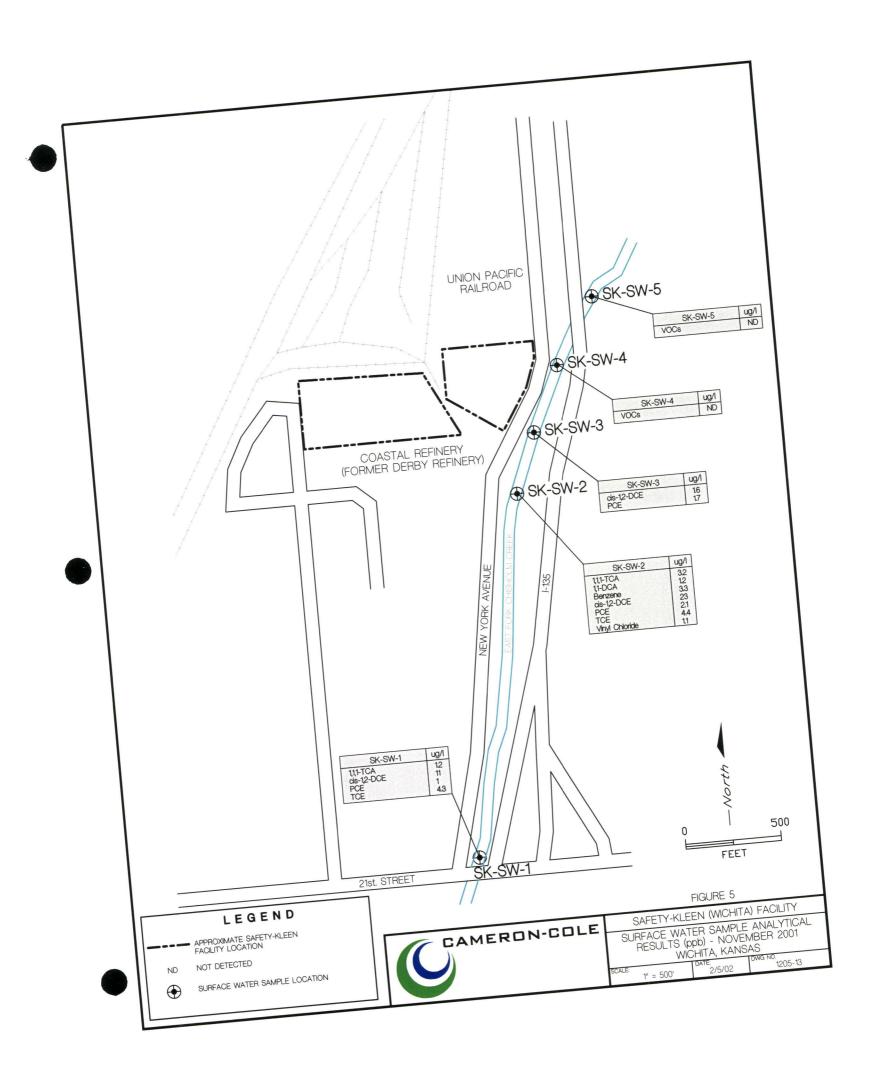
J = Estimated Value

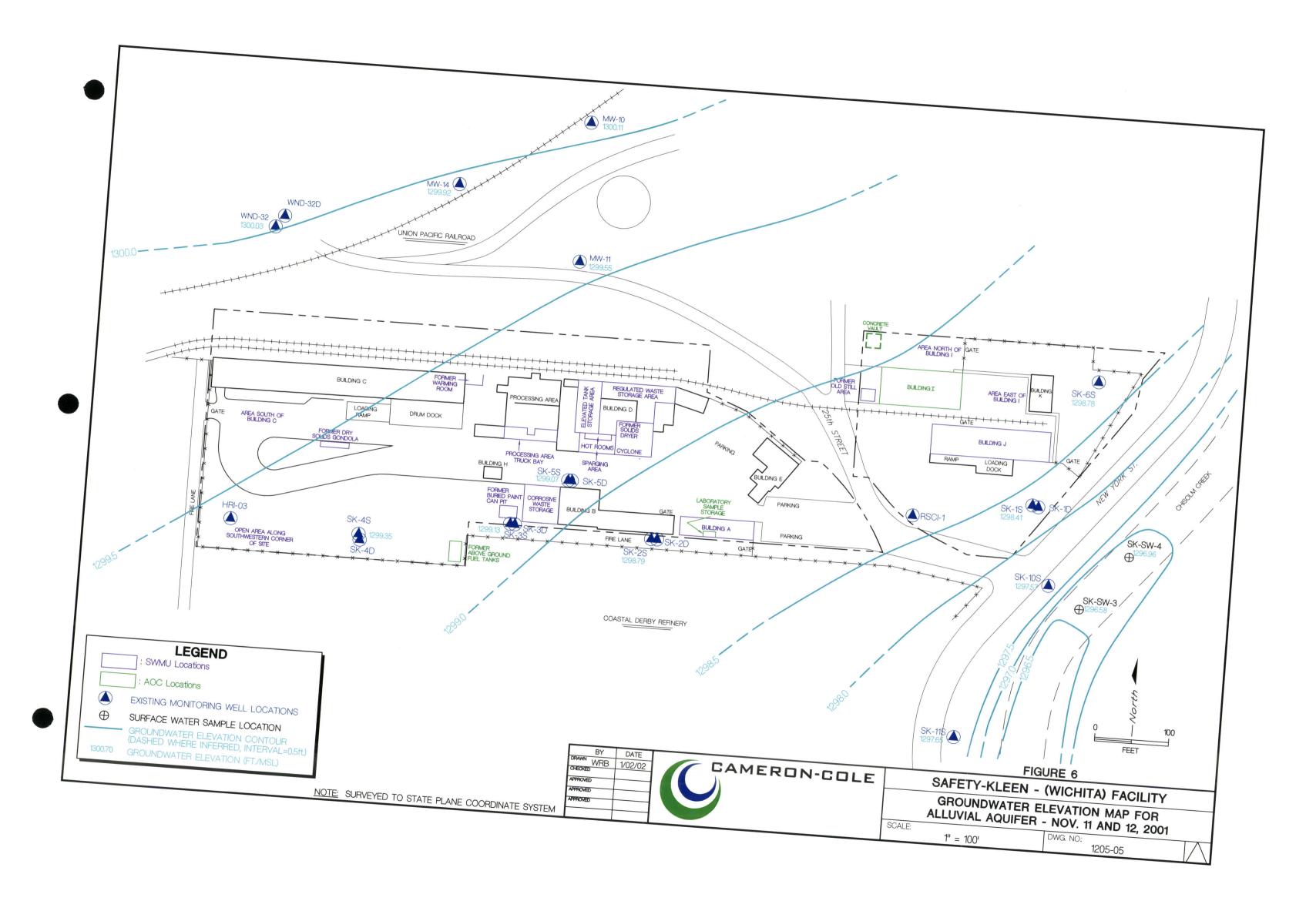


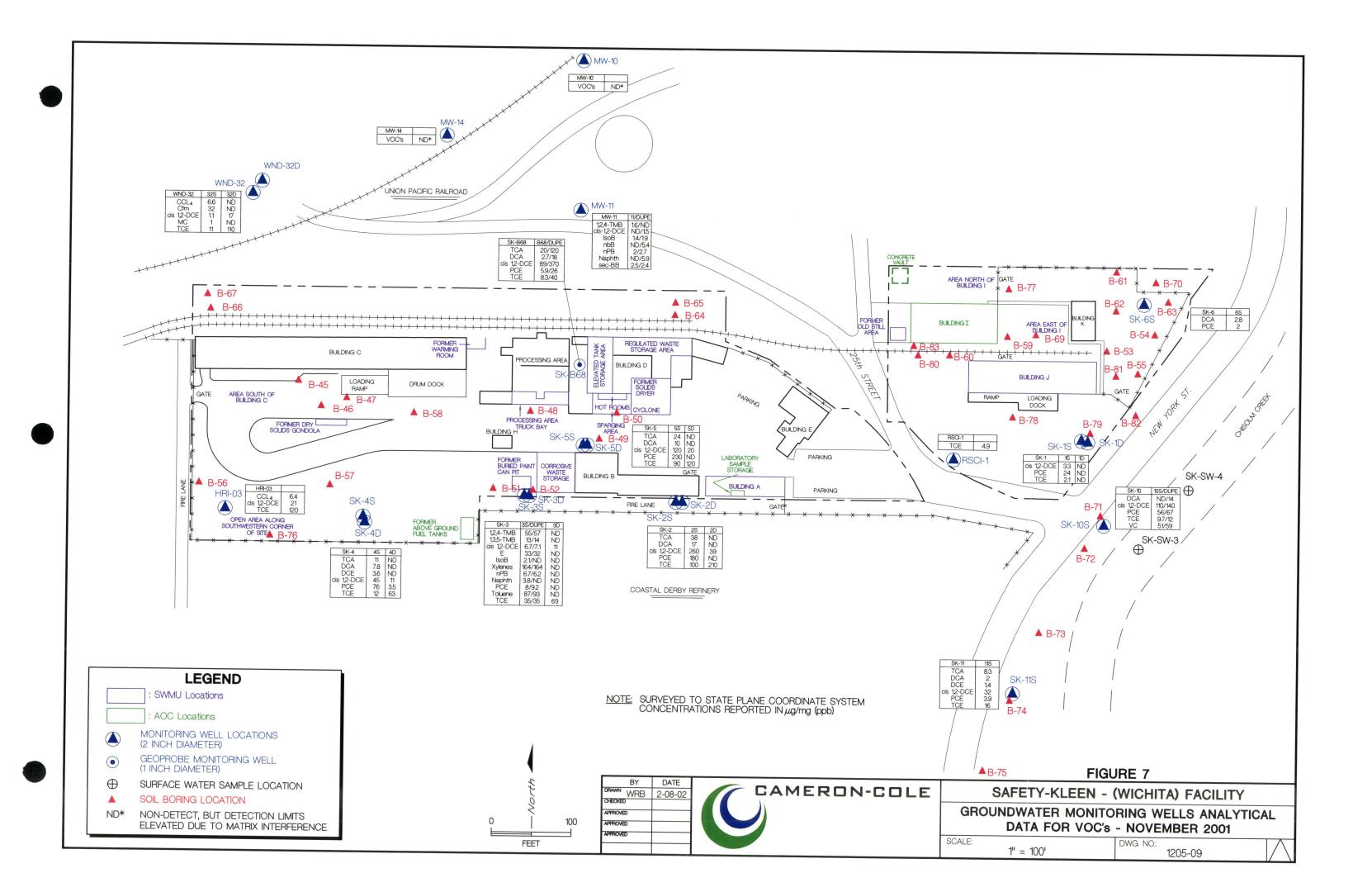


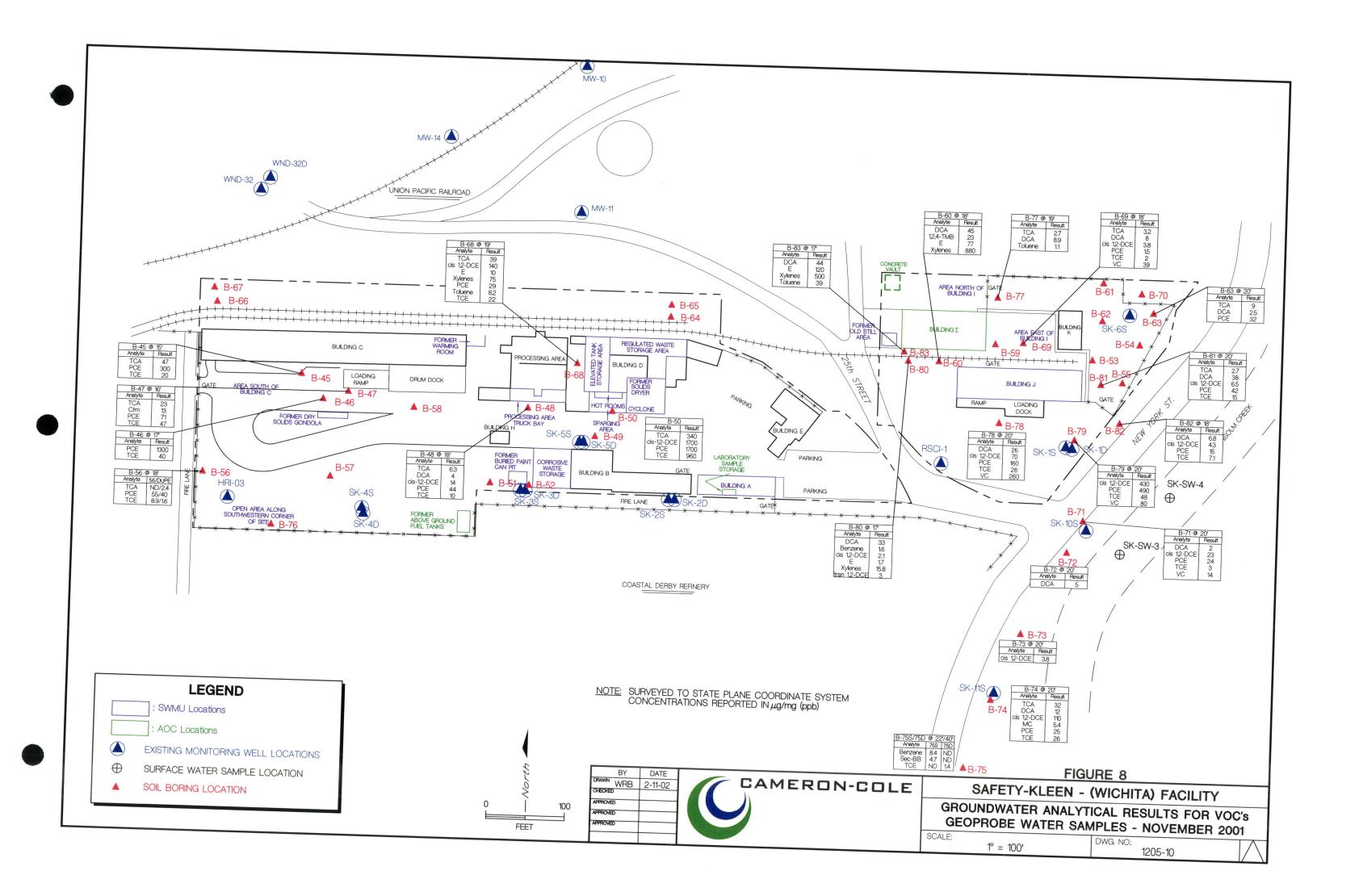














CAMERON-COLE

FIGURE 9 Revised RFI Schedule Safety-Kleen Wichita Facility

Wichita, Kansas

	TASK	DURA	TION (weeks																									00	00	00	04	00	00 04
No.	Description	1	2	3	4	5	6	7	8	9	10	11	1:	2 13	14	15	16	17	18	19	20	21	22	23	24 2	25	26	27	28	29	30	31 3	32	33 34
1	Preparation and Mobilization																																	
2	Field Work																																	
3	Laboratory Analysis																																	
4	Data Validation																																	
5	Database Updating																																	
6	Data Reduction and Evaluation																																	
7	Preparation of the RFI Draft Report																																	
8	Agency Review																																	
9	Preparation of Final RFI Report																																	

Table 1
Fluid Levels
RCRA Facility Investigation
Safety-Kleen (Wichita) Facility

							*				
			•		Rim	Casing	Screened		Oct-00		Apr-01
	Date of	Survey Co	oordinates	TOC	Elevation	Diameter	Interval	DTW	GW Elevation	DTW	GW Elevation
Well ID	Installation	Northing	Easting	Elevation	(ft-msl)	(inches)	(ft below TOC)	(ft)	(ft-msl)	(ft)	(ft-msl)
SK-1D	10/23/2000	1701433.03	1654158.09	1315.61	1315.87	2.00	33.5-38.5	15.65	1299.96	16.09	1299.52
SK-1S	10/23/2000	1701435.13	1654150.42	1315.43	1315.66	2.00	11.5-26.58	16.49	1298.94	16.44	1298.99
SK-2D	10/23/2000	1701352.84	1653651.39	1313.47	1313.75	2.00	32.75-37.75	14.62	1298.85	14.16	1299.31
SK-2S	10/24/2000	1701352.32	1653643.20	1313.51	1313.81	2.00	10.75-25.75	14.71	1298.80	14.25	1299.26
SK-3D	10/24/2000	1701358.20	1653459.78	1313.37	1313.67	2.00	32.7-39.7	13.25	1300.12	13.85	1299.52
SK-3S	10/23/2000	1701358.64	1653453.58	1313.33	1313.67	2.00	9.5-24.5	13.56	1299.77	13.65	1299.68
SK-4S	10/23/2000	1701330.43	1653252.27	1312.80	1313.03	2.00	6.75-21.75	12.12	1300.68	12.87	1299.93
SK-5D	10/24/2000	1701423.85	1653532.62	1313.65	1313.96	2.00	32.25-37.25	14.21	1299.44	13.98	1299.67
SK-5S	10/24/2000	1701423.92	1653527.32	1313.49	1314.03	2.00	8.5-23.5	13.78	1299.71	13.83	1299.66
SK-6S	10/23/2000	1701608.68	1654227.91	1316.98	1317.25	2.00	11.75-26.75	17.87	1299.11	17.55	1299.43
RSCI-1	NA	1701409.55	1653990.47	1315.49	1315.87	4.00	NA	· NM	NM	16.11	1299.38
HRI-03	NA	1701323.78	1653072.28	1312.46	1312.53	2.00	NA	NM	NM	12.56	1299.90
WND-32	7/31/1991	1701737.09	1653110.92	1318.20	1318.75	4.00	14.00-24.00	NM	NM	17.50	1300.70
MW-10	5/19/1994	1701907.56	1653522.30	1318.11	1318.64	2.00	13.50-23.50	NM	- → NM	17.21	1300.90
MW-11	5/19/1994	1701719.78	1653520.73	1316.57	1316.89	2.00	14.00-24.00	NM	NM	16.33	1300.24
MW-14	10/5/1994	1701812.20	1653352.03	1317.74	1317.90	2.00	14.60-24.60	NM :	NM	17.11	1300.63

DTW = Depth to Water

NA - Not Applicable; fully penetrating screens

NM - Not Measured

ft-msl = elevation in feet above mean sea level

TOC = Top of Casing

Survey in State Plane Coordinate System

Table 2
Soll Analytical Results
November 1999
Safety-Kleen (Wichita) Facility

					B-1	B-2		B-3	_										
				4"	16'	4"	3'			B-4		B-5	B-6	B-7	B-8	T PA	T 5.46		
Parameters		Practical Quantitation Limit	Test Method			1	+ -	16'	4"	16	16' Dup	4"	4"	4"	4"	B-9	B-10 4"	B-11 4"	B-
Percent Moisture	- 0/					1			1	1			1		-	1			
Corrosivity	%	0.5	D 2216-90	22.1	3.5	18.7	21	18.2	15.5	-				1	1			1	1
RCRA Metals	No Units	1	9040B	7.2	-	6.8	6.8	10.2	15.5	8.4	7.2	20.1	17.6	20.6	24	16.5	18.2	20.0	+
		-					- 0.0	+	0.8	7.6	7.6	6.6	5.9	6.2	6.3	6.5	6.4	29.6	20
Arsenic	mg/kg	30	6010B		NA	+	+	-					I		0.0	,0.0	0.4	6.1	6.
Barium	mg/kg	20	6010B	221	NA.	198		NA						-		-			1
Cadmium	mg/kg	0.5	6010B		NA NA	_	207	NA	171			180	155	158		1-			
Chromium	mg/kg	1	6010B	25.7	NA.	19.8		NA	0.63						238	192	223	189	23
ead	mg/kg	10	6010B	17.1	NA NA		20.2	NA	24.9	2.3	2.4	21.2	21.7	22.8	-				
Mercury	mg/kg	0.1	7471A		NA NA	15.7	12.3	NA	101		-	15.1	13.9	The second name of the second	24.9	22.4	19.6	20.7	25.
Silver	mg/kg	1	6010B		NA NA	-	-	NA		-			13.9	10	31	25.1	13.7	66.9	12.
Organic Constituents			1		INA	-		NA			-			-	-	-		-	-
/OCs			 		-								-		1				-
,1,1-Trichloroethane	ug/kg	5	8260								+								
,1-Dichloroethane	ug/kg	5	8260	-	-	1, " x I 1	-		-		+								_
,2,4-Trimethylbenzene	ug/kg	5	8260								-		-	-	-	Trans. 4.17	Profit of	-	
,2-Dichlorobenzene	ug/kg	5	8260				-			55,000	14,000								-
3,5-Trimethylbenzene	ug/kg	5										-		10 4 100		*****	* 51 - 5a :		-
hlorobenzene	ug/kg	5	8260	-	-	-	-		N	15,000							-		
s-1,2-Dichlorethene	ug/kg		8260								3,600	-	2 1 1 2 1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- 37		A-2 -2 (1.2)	4-14-1-1		-
thylbenzene	ug/kg		8260				-	2.5_2	43							_	-	-	-
opropylbenzene	ug/kg		8260							3,100	-			-	-	-	70 I - 60	19870 - 1989	
lethylene chloride	ug/kg		8260	***					-	1,000	800					-	_		_
-Xylene & p-Xylene	ug/kg		8260					5.4	5		-			6.5 - 14.5	-		20 Line		
Butylbenzene	ug/kg		8260		1			_		16.000						-			
Propylbenzene			8260						_	4600'@	3,900	-	-	24 FA 27 1	3	-			
Xylene	ug/kg		8260				-				1200' [@]				_	_			-
Isopropyltoluene			8260							5,900	1,400	-				-			
c-Butylbenzene	ug/kg		8260					_		6,600	1,500						-	-	
etrachloroethene	ug/kg		8260								-	-	-			-	_		
pluene	ug/kg		3260			6.2	-	8.1								-		-	-
ns-1,2-Dichloroethene	ug/kg		3260										12	-	51	11	31	72	
chloroethene	ug/kg		3260					_	4.4							-			-
nyl Chloride	ug/kg		3260									y y y	'	-	0/2 %	-			
phthalene	ug/kg		3260					_								7	-	10.1-	-
OCs	ug/kg	5 8	3260		NA	NA	NA	NA	NA	40.000			-			## 3 - 3 - 2 - 3 - 1		-	-
(2-Ethylhexyl) phthalate		1387, 19.5	AN KIND	4 1 1			- 101	140	-NA	12,000	4,800				_	-		-	-
nethyl phthalate	ug/kg		270C		NA	NA	NA	NIA					a stage of the	1 the	of State of the	10 mm 1 mm			
neutyi pritrialate	ug/kg	3300 8	270C	S 3 8 8	NA	NA	NA	NA	NA	NA	NA		1,100		-				San San Contract Cont
sticides							14/1	NA	NA	NA	NA		-		-	-			NA
'-DDE																-	-	-	NA
sel	ug/kg	17 8	081A		NA	NA	AIA .	- 110								-			
						14/1	NA	NA	NA	NA	NA	NA	NA	NA	NIA .	-CIA			
sel Range Organics	ug/kg	1700 8	015B	_	NA	NIA	- 112						.4/1	140	NA	NA	NA	NA	
					INA	NA	NA	NA	NA	NA	NA	NA	NA						

e = Biased high due to a coeluting isomer.

NA = Not Analyzed

⁻⁻ Not detected

Table 2 Soll Analytical Results November 1999 Safety-Kleen (Wichita) Facility

			ı		-13	B-14	B-15	B-16	B-17	В	-18	В	-19	T	B-20		R	-21	Г	B-22	
		Practical		3'	12'	4"	3'	3'	3'	3'	3' Dup	3'	13'	3'	3' Dup	16'	3'	12'	3'	3' Dup	16
Parameters		Quantitation Limit	Test Method																-	3 Бир	"
Percent Moisture	%	0.5	D 2216-90	18.8	13.5	14.3	18.9	24	04	40.0	15.0										1
Corrosivity	No Units	1	9040B	5.5	13.3	6.3	6.1	6.2	21	18.9	15.9	8.4	20.4	20.4	21.2	19	9.5	17.6	19.8	21.1	2
RCRA Metals	110 011110		100,100	0.0		0.5	0.1	0.2	6.1	5.8	6.6	7.6	-	6.6	6.4	- "	7.7	-	7.4	7.1	
Arsenic	mg/kg	30	6010B		NA	-															
Barium	mg/kg	20	6010B	181	NA.	143	115	400					NA					NA			
Cadmium	mg/kg	0.5	6010B		NA	143		166	95	181	166	219	NA	148	152	NA	154	NA	184	157	N
Chromium	mg/kg	1	6010B	19	NA NA	23.3	20.4						NA			NA		NA			N
Lead	mg/kg	10	6010B	15.5	NA	11.6	_	20.1	20.3	21	18.8	20.8	NA	18.7	18.9	NA	15.1	NA	21.8	20.1	N
Mercury	mg/kg	0.1	7471A	10.0	NA NA	11.0	11.5	1,560	146	12.1	10.5	68.4	NA	13.6	10.7	NA	12.9	NA	10.2	26.2	N
Silver	mg/kg	1	6010B	-	NA			-	0.4		-		NA	-	- 1 m	NA	144 - 47	NA	· · · ·	- 1	N
Organic Constituents		<u> </u>	50.05		1474				2.4				NA			NA		NA			N
VOCs			 																		
1,1,1-Trichloroethane	ug/kg	5	8260		1																\vdash
1,1-Dichloroethane	ug/kg	5	8260		-	-			-		10 - 10 h	-		-	1X 1 1 1	1. – 4.0	-		* * * * * * * * * * * * * * * * * * * *	a manage	J. 16.
1,2,4-Trimethylbenzene	ug/kg	5	8260	-								67			31						
1,2-Dichlorobenzene	ug/kg	5	8260		-			-	10,71 1 1	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		-		••	or ton-one o	(1440 <u></u>) (1	- 01	jaja 🕳 🗀	11.0 -1 .00		Quint.
,3,5-Trimethylbenzene	ug/kg	5	8260	-	-						-										
Chlorobenzene	ug/kg	5	8260			-			-	-		a = , a = 1	-	1 9 1 1		- 6. Th	0 - 1 - 10 m	1797 - 377	- 7 - 7	· · ·	W.
is-1,2-Dichlorethene	ug/kg	2.5	8260	*** -	-	-															
thylbenzene	ug/kg	25	8260			-	-		-	78 7-4-57	-	-	-	10	120	-	- t	28	26	18	2
sopropylbenzene	ug/kg		8260	-		-							-					-			-
Methylene chloride	ug/kg		8260	28	-	5	-	-				-		- ·		••	-	- 1	-		-
n-Xylene & p-Xylene	ug/kg		8260			-					5.2		5.1					26	5.5		-
-Butylbenzene	ug/kg		8260	-				-			-		-		-			-	-	281 - 29	1500
-Propylbenzene	ug/kg		8260																		-
-Xylene	ug/kg		8260				-		-	-					- 1	-	_	W 4 - 111	-		12 12 L
-Isopropyltoluene	ug/kg		8260					-													-
ec-Butylbenzene	ug/kg		8260		-		-	-	:		-					7 · · · · · · · · ·	-		1-4	-	-
etrachloroethene	ug/kg		8260	800	35																-
oluene	ug/kg		8260					-					24	24	480	12	6,800	490	95	48	4
ans-1,2-Dichloroethene	ug/kg		8260																		
richloroethene	ug/kg		8260			-	-		-			-	·				-	-	-		100
inyl Chloride	ug/kg		8260					52						5.7	120			85	72	44	1
laphthalene	ug/kg	the same of the sa	8260		_	a Maria de Per		-	-		-	34		·		-	10 mm 11 mm		1 4.1	-	
VOCs	2000	7.19.79.29	12,790/200	9 A . 1 VISIS 1	7		-									**					-
is(2-Ethylhexyl) phthalate	ug/kg	330	8270C	NA	NA	NIA	ALA	NIA	2 12 2	9 2 2 5 1	1. P. S. S.	10.3 (2.5)	a docta to		especial states			Alternative Comment		3 Digita Ank	19.00
imethyl phthalate	ug/kg		8270C	NA NA	NA NA	NA	NA	NA			1000	9400	NA			NA	24,000	NA	NA	NA	N
	ugring	0000	02700	IAM	IVA	NA	NA	NA	-	-	- 1	8400	NA		ngi i 🕶 o ng	NA	A	NA	NA	NA	N
esticides																					
4'-DDE	ug/kg	17	8081A		NA	NA	N/A	A16	NIC .												
iesel	ug///g	- ''	00017		AVI	INA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	N
iesel Range Organics	ug/kg	1700	8015B	NA	NA	NA	NA	NIA .	ALC.	NIA											
ggaco	-3.49	1,00	00100	IAV	INA	AVI	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	N/

e = Biased high due to a coeluting isomer.

NA = Not Analyzed

-- Not detected

Table 2 Soli Analytical Results November 1999 Safety-Kleen (Wichita) Facility

				F	B-23		E	3-24	E	3-25	B-26	F	3-27	B-28	E	3-29	T	3-30	T 5.5
		Practical		3'	8'	8' Dup	0-3"	6'	11'	15'	10'	3'	15'	4"	4"	13'	4"	16'	B-3 ⁻
		Quantitation	1							1		1	 	 	 	- '3-	-	1 10	
Parameters	1	Limit	Test Method		i			1	1	1	1	İ	1			1	ĺ	[
Percent Moisture	%	0.5	D 2216-90	21.9	17	22.3	10.0	44.5	10.4	100					<u> </u>	1		L	
Corrosivity	No Units	×-1. · · ·	9040B	6.7	- ''	22.3	7.4	14.5	19.1	12.6	18.5	18.3	7.2	26.7	5.6	10.4	5.5	16	18.6
RCRA Metals	1		100700	0.7			1.4	7.7	7.3		7.6	6.4		7.1	8.5	-	7.4		7.3
Arsenic	mg/kg	30	6010B		1 A1A	111				<u> </u>					<u> </u>	1			
Barlum (1994) (1995)	mg/kg	30 20 - A	6010B	202	NA NA	NA	49.2	 		NA	-		NA	-		NA	-	-	-
Cadmium	mg/kg	0.5	6010B		NA NA	NA NA	44.1	150	63.9	NA	103	314	NA **	232	134	NA	110	NA	305
Chromium and a second and a second	mg/kg	1	6010B		NA NA	NA	46.8		 -	NA		-	NA		_	· NA	37.3	NA	 -
Lead	mg/kg	10	6010B	21.3 46.6	NA NA	NA .	33.7	15	8.1	NA .	11.7	22.8	NA	25.9	14.5	: NA	7-39.7	NA	17.4
Mercury	mg/kg	0.1	7471A		NA NA	NA	392		 -	NA		12.6	NA	13.8	10.1	NA	319	NA	20.9
Silver	mg/kg	1	6010B	-	NA :	NA .	0.27	914 10		NA	· 3 - · ·		. NA	1 55 7 1 4 25	0.77	NA ·	∞ 0.11 €	NA	s 1
Organic Constituents	mg/kg	<u></u>	JOU TOB		NA NA	NA	- -	 -	 - -	NA		1.4	NA NA			NA	-	NA	1.1
VOCs			ļ-,		ļ					L									T
1,1,1-Trichloroethane			10000					, ,						1	1	· · · · · · · · · · · · · · · · · · ·		 	
1,1-Dichloroethane	ug/kg	5	8260	-	. 1/ 1/4		-			-		· ·			ds - 4	40° , 10° ;	10 - 10 Y		
1,2,4-Trimethylbenzene	ug/kg ug/kg	5	8260						-		-		_			-		 	
1,2-Dichlorobenzene			8260	TAY) 🛶 York	. S. C. J N					-,		, " +-> ·	100 am 5 0	13.5 🕳 🛪 P	1.45 - 1.75	100 miles	143, 17 	20, 27	93
1,3,5-Trimethylbenzene	ug/kg	5	8260				<u> </u>			_	`-	-		-					21
Chlorobenzene	ug/kg		8260	· · · · · · · · · · · · · · · · · · ·		, : i : : .	14 5 8 - 5		:	· • · = ;·					Selfy and some	Q 25 = 2 m €	16.2 - 20	100 - 1640	35
sta-1,2-Dichlorethene	ug/kg ug/kg	5 2.5	8260					-	-		_			-					 ~
Ethylbenzene	ug/kg ug/kg	2.5	8260	78		7.3	- , .				1 to 🛶 1 co		1, 2 - 1 or	\$ 20, am 1, 191	- jt 145	5-15% 28-16	25112 %	18	4.486.
sopropylbenzene	ug/kg ug/kg		8260 8260	-	,		440			6.5									8.5
Methylene chloride	ug/kg	5	8260	_		.tv : 🕳 😶		- *	~ = (*)		124 1				A Section 1		30.00-300.0	1750 - 18 ·	ration - 1
n-Xylene & p-Xylene	ug/kg		8260											-		-	-	5	-
n-Butylbenzene					· , · —	· · · · · ·	700	23	: - 10	32		···	14	salah 🛶 🚉	: ::	1 ST 1.0.0	149-34	pr 1 4 2 4 7 1	₹ 50
n-Propylbenzene	ug/kg ug/kg		8260				-	-	<u> </u>			-			_	-			25 [®]
-Xylene	ug/kg ug/kg		8260	jeva 🏎 🦠 .	940 1 145	-	^	*		-	/ 🛶 🥫		1540 100	,	- 3 , 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	N. 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	of the same	10 to 10 to 12	7
)-Isopropyltoluene	ug/kg ug/ka		8260 8260		<u></u>		560	7.3		12			8.3	-					24
sec-Butylbenzene	ug/kg ug/kg		8260	98 85.	''	<5. · <. * .		:		_				***	•	95 1 4 5 19	- 3-y,t	50 . S	7.6
etrachloroethene	ug/kg ug/ka		8260									-		-					5
Toluene	ug/kg ug/kg		8260	· · · ·	P Y →	_			1	- N 	Y''	35	7.6	₹***** · :	1. · - 1. · ·	-370 - 23. h	38	27	110
rans-1,2-Dichloroethene	ug/kg ug/ka		8260	1			56	-						-		_			
richloroethene	ug/kg		8260		- 1,1	· · · · · · · · · · · · · · · · · · ·	- :	- (· ·	: · · · · · ·	45. 🕶 😽	_	: · · · · · · ·	100 mg 4 100	1 1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1. 3. 2 days - 1	ئى بىي بىلىنىڭ يىلىنىڭ يىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ ئىلىنىڭ		
/inyl Chloride	ug/kg			a Sets carre				<u> </u>									-	28	-
laphthalene	ug/kg		8260		** (., = -)			-	% e. **; '₹		1 1 V 110		1.54 - 1.54	75. — 25.	A	The same	\$55 Jun 1999	· 1000000000000000000000000000000000000	13/2 14
VOCs 112 (may Ages a cassion)	ug/kg	3		 150(\$6.50.8)							-	-		~~				-	37
is(2-Ethylhexyl) phthalate	ug/kg		8270C		te del degra	Salara S	1. (m.) 1 1 1	4 1 4 4 4 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	ំនេះ «ខែធ្នូក្សា	1,000	e in the state of	and the same	ાં પ્રતાસાર કરાયા. ટોક્સ	HARVE NEWS		र क्षेत्र क्ष्युत्सर् हे.	" (; ; ; m, ; ,) ; ; .	Je 2 - 5, 12 - 14.	03045-15
Simethyl phthalate	ug/kg -			NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA:	NA	NA	NA
- Tricardi bunnando Casa Casa	ug/kg ·	3300	8270C	NA	NA .	NA	NA	NA	NA	· NA	NA .	· NA	NA 🔨	NA	· NA	NA .	· NA	NA :	NA.
'esticides																			† · · · · ·
4'-DDE	ua/ka	17	8081A	NA	NIA .	- NA			<u> </u>										
lesel	ugray		000 IA	IVA	NA	NA	NA	NA NA	NA	NA	NA	NA	NA	NA	NA	NA :	17	NA	NA
Plesel Range Organics	ug/kg	1700	8015B	NA.															1
.ccc tango Organios	ug/kg	1700	00135	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	NA	NA	NA	NA NA	NA	NA	NA.

Biased high due to a coeluting isomer

NA = Not Analyzed

Not detected

Table 2 Soil Analytical Results November 1999 Safety-Kleen (Wichita) Facility

				B-32	В	-33	B-34	В	-35	B-36	B-37	B-38	B-39	B	-40	B-41	B-42	B-43		-44
			_	0-3"	0-3'	15'	0-3'	6'	13'	3'	3'	3'	4"	4"	16'	4"	4"	4"	11'	1
		Practical					†			 		 	 '-	 	'0	 -			- ''-	
Parameters	Ì	Quantitation Limit	Test Method												-					
ercent Moisture	%	0.5	D 2216-90	22.3	20,7	8.4	22.8	13.2	20.3	24.2	21.7	23.2	11.1	14.6	7.8	12.0	40.4	00.4	1440	ب ا
Corrosivity of the stage of the	No Units	Sec. 1 . 1 . 1 . 1	9040B	7	6.8		6.7	7.1	- 20.5	7.4	6.5	7.8	7.8	7.2	7.0	13.9	18.4	23.4	11.9	
RCRA Metals							1.			7.4	0.0	7.6	7.0	1.2	-	0.9	7.4	6.4	6.9	-
rsenic	ma/ka	30	6010B			NA	 	 	NA						AIA	-	ļ	<u> </u>		+
Barlum 🔩 🕶 🕬 🕬 😁 😁	mg/kg	· · · 20 · ·	6010B	189	319	NA NA	191	67.9	NA NA	163	172	98.4	86.5	344	NA		405			-
Cadmium	ma/ka	0.5	6010B	-	-	NA NA	- 131		NA NA	103			0.69		NA .	369	185	202	38.4	
Chromium	ma/ka	5:51 . 0	6010B	21.1	21.4	NA NA	21.6	11.8	NA NA	18.7	22.8	10.3	17	3.3	NA NA	1.6	10.7			!
ead	mg/kg	10	6010B	15	20.3	NA NA	12.2	296	NA NA	10.7	15.6	25.8	19.8	91.7	NA NA	60.4	19.7	24.5	12	
Mercury	mg/kg	0.1	7471A · · ·			NA NA	12.2	250	NA NA	· • · · · · · · · · · · · · · · · · · ·	15.6	20.6		7800	NA NA	320	16.6	15		╄
ilver	mg/kg	1	6010B	1	1.1	NA.	-	 	NA NA				<u> </u>	0.23	NA ·	0.16	-		0.4	4.5
Organic Constituents	1		100.02			13/2	 	 	INA				 -	3	NA	1.4	 	1	-	1_
OCs	 							 	· .	· ·		<u> </u>	ļ	ļ <u>.</u>	<u> </u>	·	<u> </u>			
1.1-Trichloroethane	ug/kg	5	8260			·. e	-	-	_								40			┦
.1-Dichloroethane	ug/kg	5	8260				 	 				-					18			1100
,2,4-Trimethylbenzene	ug/kg	5	8260			 	 -	 					5	-		-				╀
2-Dichlorobenzene	ug/kg	5	8260					-				-			10 44 6 1		5.9			
3,5-Trimethylbenzene	ug/kg	19 1 15 19 19	8260					 -				-	-		-	<u> </u>		<u> </u>	<u> </u>	╄-
hlorobenzene	ug/kg	5	8260			-	 	1,200	5.6					-	-	232 - 244	25	· */ 🛥 🎮	3 * 3 = 3 * 3	
s-1,2-Dichlorethene	ug/kg	2.5	8260	4.6	3		3	1,200	5.0	3	12		-	-	-	 - -			<u> </u>	—
thylbenzene	ug/kg	25	8260		-		-	- -	-	-			8.4		-	10 mil 19 3	F 1 1131	-	· · · · · · · · · · · · · · · · · · ·	1,345
opropylbenzene	ug/kg	1000	8260		_		-							-	-		8.7		-	
lethylene chloride	ug/kg	5	8260				 	 							`: - *-	·	- ** - - * *	-	<u> </u>	``
-Xylene & p-Xylene	ug/kg	5	8260	· · · · · · · · · · · · · · · · · · ·				7 S /S					-	5.7	-	-			<u> </u>	
-Butvlbenzene	ug/kg	5	8260					 						· = · ·.		100 mm (100)	18		4.2 - 13	
-Propylbenzene	· ug/kg	5	8260		30 and 1				-	-				<u> </u>	<u> </u>	 -		-		1
-Xylene	ug/kg ug/kg	2.5	8260				- 4		-			2 · +- : : :		2.1 7.12	gray 🛖 Profi		:	.s. -	. 3-1	
-Isopropyitoluene	ug/kg	# 1/1 5 # 1/2	8260	- 			 _ =			<u> </u>		<u> </u>		-	-		80			<u> </u>
ec-Butvibenzene	ug/kg	5	8260		- · ·		-		· - · .		f " " "			. `` :		1.57 - 1 th		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	_ (° - ==,5 ≥	, v,
etrachloroethene	ug/kg	\(\frac{3}{2}\) \(\frac{3}{2}\) \(\frac{3}{2}\)	8260	16	110		9.4	-	-				· -			-				
oluene	ug/kg	25	8260	-				· ·		':	· - ·		-	9.7	9.2	25	7 13	~3 →` ⊹	<u>್, ⊸∞</u>	16.
ans-1,2-Dichloroethene	ug/kg		8260		-					-		<u> </u>					7.6	-		1
richloroethene	ug/kg ug/kg	5	8260	6.6	29	-	-	-	<u> </u>		<u>.</u>	-	- 1 1) ' '- '			1 5 2 1	* -	54 5 4 66 5	
invi Chloride	ug/kg "		8260	0.0	29		-	 -			-			-	-	<u> </u>		<u> </u>		
aphthalene	ug/kg	5	8260						**= **,	- 15° 15°		'	-	-	1 1 - 1 2 m	**************************************	199 3 - 17 15	. 1988 - 1 Car	Middle The State of the State o	1,585
VOCs the satisfies a vigor	ug/kg		0200	73.1 K , 14.1		-												-		1
s(2-Ethylhexyl) phthalate	ua/ka	330				NIA	110	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		- 115		, i		14 A.C.	2 30 8 m 1995	4000000	85 1, 444	and the sale	ale du bei	· In
methyl phthalate	ug/kg ug/kg		8270C	 -1,21	NA	NA NA	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	-	NA	
mount primaidio	v ug/kg *	3300 ***	02/00	4.1.	NA .	, NA	NA		NA ·	NA 🥴	NA ·	· NA	NA	NA ·	NA	r NA	NA :	-	· · · NA	÷
esticides								 								 	ļ	ļ <u>.</u>	 	┼
4'-DDE	ua/ka	17	8081A			NA		NA NA	NA	NA NA	NA	NA	NA	NA	NA	ATA	NIA .	1.2	 	┿
iesel									14/1	IAV	IVA	IVA	IVA	NA	INA	NA NA	- NA	NA	NA NA	
iesel Range Organics	ug/kg	1700	8015B		NA	NA	NA	NA	NA	2100				N/A						
	~~: <u>~</u>	,,,,,	00,00		11/1	11/	14/4	I IVA	INM	2100			NA	NA .	NA	NA	. NA	NA	NA NA	

Notes:

© = Blased high due to a coeluting isomer.

NA = Not Analyzed

- Not detected

Table 3 Sampling Details RCRA Facility Investigation Safety-Kleen (Wichita) Facility

GeoProbe Soil Sampling Depths Soil Sample Analyses GeoProbe Groundwater Sampling Depths Soil Sample Analyses Depths Soil Sample Analyses Soil Sample Analyses Depths Soil Sample Analyses Soil Sample Analyses Depths Soil Sample Analyses Soil Sample An	
Borling ID	Surface Water Sampling
B-45 Building C Loading Ramp	. :
B-46 Building C Loading Ramp	Analyze for VOCs
B-47 Building C Loading Ramp	·
B-48 South of Processing Area	The recent of the state of the
B-49 South of Processing Area	
B-50 South of Processing Area	
B-51 Former Paint Can Burial Pit	
B-52 Former Paint Can Burial Pit	
B-53	a Roma de la compansión de la compansión de la compansión de la compansión de la compansión de la compansión de
B-54 East of Buildings J and K	
B-55	Transportation of the control of the
B-56 Southwest Portion of Site	
B-57 Southwest Portion of Site X	
B-58 Southwest Portion of Site (near B-11)	Date Contacts in the Schatter Resident and Case
B-59 Spur Between Bldgs. I & J	
B-60 Spur Between Bldgs. I & J X X X X X X X X X	tot maideatis archeeltarita menararut
B-61 Far Northeast Corner of Facility	
B-62 Far Northeast Corner of Facility	- Consistence - Harris (1988 or 1984 or 18 peter decisit in p
B-63 Far Northeast Corner of Facility	
B-64 Rail Spur Along North Property Boundary X X X X X X X X X	a ser a como de ser a de ser a ser a como de
B-65 Rail Spur Along North Property Boundary X X X X X X X X X	
B-66 Rail Spur Along North Property Boundary X X X X X X X X X	Assessment Asset Assessment Services and Assessment Services
B-67 Rail Spur Along North Property Boundary X X X X X X X X X	
B-68 Processing Area & Building D X X X X X X X X X	
B-69 Area east of Building	
B-70 Northeasternmost Corner of Site	
B-72 Along New York Street X X X X X X X X X X X X X X X X X X	91 - 31 - 31 - 31 - 31 - 31 - 31 - 31 -
B-72 Along New York Street X X B-73 Along New York Street X X B-74 Along New York Street X X B-75 Along New York Street X X B-76 Southwest Portion of Site X X	
B-74 Along New York Street B-75 Along New York Street C X X X X B-76 Southwest Portion of Site X X X X	
B-74 Along New York Street X X B-75 Along New York Street X X B-76 Southwest Portion of Site X X	
B-75 Along New York Street X X X X X X X X X X X B-76 Southwest Portion of Site X X X X X X X X X X X X X X X X X X X	
B-77 Northeast of Building I (near B-39) X X X X	
B-78 South of Building J (near former B-33)	20,733,5 M.S.C.C. (152,752,193
B-79 Near former EB-5 boring X	
B-80 West of Building I X X X X X X X X X X X X X X X X X X	
SK-SW-1 North of 21st StreetEast Fork Chisolm Creek	X
SK-SW-2 SE of site - East Fork Chisolm Creek	X
SK-SW-3 E of southern site boundaryEast Fork Chisolm Creek	X
SK-SW-4 E of NE corner of site East Fork Chisolm Creek	X
SK-SW-5 Upgradient of site/E of I35East Fork Chisolm Creek * PAHs will be analyzed by Method 8270 and only bis(2-ethylhexyl)phthalate and dimethyl phthalate values will be reported	X

^{*} PAHs will be analyzed by Method 8270 and only bis(2-ethylhexyl)phthalate and dimethyl phthalate values will be reported

^{*} Sample will be collected near base of the alluvial aquifer, just above the shale and or deep clay (weathered bedrock)

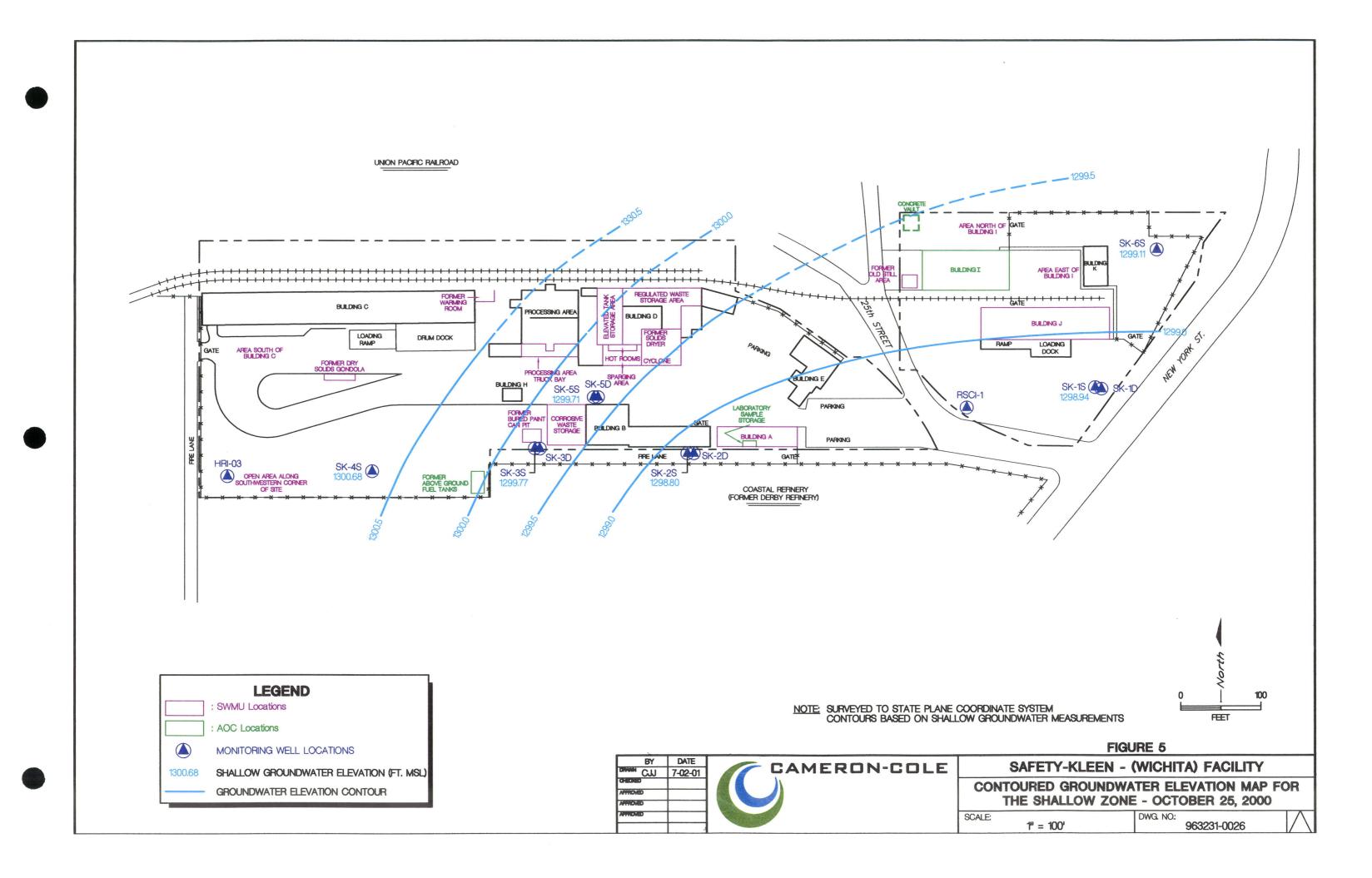


Table 4 Groundwater Analytical Results for Detected Volatile Organic Compounds October 2000 Safety-Kleen (Wichita) Facility

Parameter Name	Units	Practical Quantitation Limit	SK-1S	SK-1D	SK-2S	SK-2D	SK-2D (DUP)	SK-3S	SK-3D	SK-4S	SK-5S	SK-5D	SK-6S
Dilution Factor			1	1	1	10	10	1	2	10	4	3.3	1
Volatile Organic Compounds								1					'-
1,1,1-Trichloroethane	ug/L	< 1.0	-	-	6.3	-	_	1.7	7.0	15.0	 		
1,1-Dichloroethane	ug/L	< 1.0	-	-	2.3	-		-	-	-	- 1		1.7
1,1-Dichloroethene	ug/L	< 1.0	-	-	1.2	-	-	-			- 1		 ':' -
1,2,4-Trimethylbenzene	ug/L	< 1.0	-	-	•	- 1		-	-		120.0	270.0	
1,3,5-Trimethylbenzene	ug/L	< 1.0	•	-	•	-		-		-	42.0	86.0	
Bromodichloromethane	, ug/L	< 1.0	-	-	-	• •	-	-	2.2				
Carbon tetrachloride	ug/L	< 1.0	•	•	-		-	-		-	6.3		-
Chlorodibromomethane	ug/L	< 1.0	-		-	- 1	-	-	2.7		- 1	•	
Chloroform	ug/L	< 1.0	-	-	•	-		-	2.5	-	20.0	-	
cis-1,2-Dichloroethene	ug/L	< 1.0	-	2.2	38.0	58.0	53.0	13.0	18.0	23.0	8.2	10.0	
Ethylbenzene	ug/L	< 1.0	-	-	•	-	-	-		- :	33.0	33.0	
Isopropylbenzene	ug/L	< 1.0		-		-	-	-	• •	-	-	9.2	-
m-Xylene & p-Xylene	ug/L	< 2.0	-	-	-	-	_	-	-	-	120.0	90.0	<u> </u>
Naphthalene	ug/L	< 1.0	-	-	-	- 1	-	-	-	-	15.0	26.0	
n-Butylbenzene	ug/L	< 1.0	-	-	-	-	<u>-</u>		-	-	-	14.0	 -
n-Propylbenzene	ug/L	< 1.0	_	-	_	-	-	-	-	-	12.0	40.0	
o-Xylene	ug/L	< 1.0	-	-	-	-	-	-	-	-	41.0	23.0	
p-Isopropyltoluene	ug/L	< 1.0	-	-	-		-	-	•		-	6.4	-
Tetrachloroethene	ug/L	< 1.0	1.4	3.2	31.0	20.0	13.0	17.0	66.0	160.0	6.0	-	-
Toluene	ug/L	< 1.0	-	-	_	-		-	-	-	54.0	9.9	
Trichloroethene	ug/L	< 1.0	-	-	19.0	240.0	290.0	7.4	42.0	33.0	63.0	74.0	

Notes:

NA = Not analyzed

"-" = Results were below reporting limits

Analysis by USEPA SW-846 Method 8260B

Table 5 Groundwater Analytical Results for Detected Volatile Organic Compounds April 2001 Safety-Kleen (Wichita) Facility

		Practical										
Parameter Name	Units	Quantitation Limit	SK-1S	SK-1S NP	SK-1S AP	SK-1D	SK-2S	SK-2D	SK-3S	SK-3D	SK-3Z (DUP - 3D)	SK-4S
Sample Date			Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01
Dilution Factor			1			1	7.12. 01	7,5,0,	7.5.01	7,0,0,	Api 01	Api-oi
Volatile Organic Compounds						· · ·						
1,1,1-Trichloroethane	ug/L	< 1.0	-	-			150.0	_				24.0
1,1-Dichloroethane	ug/L	< 1.0	-	-	-	-	35.0		_	-		5.9
1,1-Dichloroethene	ug/L	< 1.0	-	-	-	-	-				_	5.9
1,2,3-Trichlorobenzene	ug/L	< 1.0	-	-	-	-	26.0	-	-	-		- 0.0
1,2,4-Trichlorobenzene	ug/L	< 1.0	-	-	-	-	22.0	-	-	-	-	
1,2,4-Trimethylbenzene	ug/L	< 1.0	-	-	-		-	-	130.0	-		
1,3,5-Trimethylbenzene	ug/L	< 1.0	-	-	-	-	-		35.0		_	
1,3-Dichlorobenzene	ug/L	< 1.0	-	-	-	-	23.0	-	-	-		
Benzene	ug/L	< 1.0	-	-	-	-	-	-		-	•	
Carbon tetrachloride	ug/L	< 1.0	-	-	-	-	-	-		-		-
Chloroform	ug/L	< 1.0	-	•	-	- '		1	-			-
cis-1,2-Dichloroethene	ug/L	< 1.0	1.2	1.8	-	-	730.0	42.0		12.0	13.0	17.0
Ethylbenzene	ug/L	< 1.0	-	-	-		-	-	67.0	-		
Methylene chloride	ug/L	< 1.0	-	-	-	-	-	- ,	-	-		
m-Xylene & p-Xylene	ug/L	< 2.0	-	-	-	-	-	-	230.0	-		-
Naphthalene	ug/L	< 1.0	-	-	-	-	29.0	-	_	-		
n-Propylbenzene	ug/L	< 1.0	-	-	-	-	-		20.0		• .	
o-Xylene	ug/L	< 1.0	-	-	-	•	-	-	88.0	-	-	-
Tetrachloroethene	ug/L	< 1.0	3.4	9.9	3.4		600.0	-	11.0	-	2.0	110.0
Toluene	ug/L	< 1.0	-	-		-	-	-	200.0	-	-	
Trichloroethene	ug/L	< 1.0	-	1.0	-	-	390.0	270.0	46.0	90.0	94.0	18.0
Vinyl chloride	ug/L	< 1.0	1.8	-	-		-	-	-		-	

NA = Not analyzed

Analysis by USEPA SW-846 Method 8260B

Duplicate analytical results for surface water sampling conducted by KDHE are provided on Figure 4

[&]quot;-" = Results were below reporting limits

Table 5 Groundwater Analytical Results for Detected Volatile Organic Compounds April 2001 Safety-Kleen (Wichita) Facility

		Practical Quantitation	SK-4Z									
Parameter Name	Units	Limit	(DUP - 4S)	SK-5S	SK-5D	SK-6S	SK-SW-1	SK-SW-2	SK-SW-3	SK-SW-5	RSCI-1	HRI-03
Sample Date			Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01
Dilution Factor						1	1			•		
Volatile Organic Compounds												
1,1,1-Trichloroethane	ug/L	< 1.0	24.0	5.9	-	-	-	-	-			-
1,1-Dichloroethane	ug/L	< 1.0	-	2.4	•	-	-	-	-		-	-
1,1-Dichloroethene	ug/L	< 1.0	5.6	1.2	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	ug/L	< 1.0	-	-	-	-	-	-			-	
1,2,4-Trichlorobenzene	ug/L	< 1.0	-	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	ug/L	< 1.0	-	-	-	-	-	-	-	-		-
1,3,5-Trimethylbenzene	ug/L	< 1.0	-	-	-	-	-		-	-		-
1,3-Dichlorobenzene	ug/L	< 1.0	-	-	•	- -	-	-	-	-	-	-
Benzene	ug/L	< 1.0	-	-	•	-	1.4		-			4.3
Carbon tetrachloride	ug/L	< 1.0	-	-	-	-	-	-	-	-	-	7.0
Chloroform	ug/L	< 1.0	-	-	-	-		1 4 m.			-	2.6
cis-1,2-Dichloroethene	ug/L	< 1.0	-	37.0	25.0	-	3.3	3.4	-	1.0		13.0
Ethylbenzene	ug/L	< 1.0	-	-	•	-	-		-	-	-	-
Methylene chloride	ug/L	< 1.0	-	-	-	-	-		-	-		-
m-Xylene & p-Xylene	ug/L	< 2.0	-	-	-	-		-	-		-	-
Naphthalene	ug/L	< 1.0	-	-	•	-	1.0	-	-	-	-	-
n-Propylbenzene	ug/L	< 1.0	-	-	-	-	-	-	-	-	-	-
o-Xylene	ug/L	< 1.0	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	< 1.0	98.0	46.0	-	-	-	-	-	-	-	11.0
Toluene	ug/L	< 1.0	-	-	-	-	-	-	-	-	-	-
Trichloroethene	ug/L	< 1.0	17.0	22.0	180.0	-	3.9	3.8	3.8	4.7	3.1	95.0
Vinyl chloride	ug/L	< 1.0	-	-	-	-	-	-	-	-	-	-

Notes:

NA = Not analyzed

Analysis by USEPA SW-846 Method 8260B

Duplicate analytical results for surface water sampling conducted by k

^{*-* =} Results were below reporting limits

Table 5 Groundwater Analytical Results for Detected Volatile Organic Compounds April 2001 Safety-Kleen (Wichita) Facility

Units	Quantitation Limit				
Units	LIMI	I I I D I I I I I I I I I I I I I I I I	LIDEOLI AA	l	
		UPMW-10	UPMW-11	UPMW-14	WND-32
		Apr-01	Apr-01	Apr-01	Apr-01
	•				
		-	-	-	-
	< 1.0	-	-	-	-
ug/L	< 1.0	-	-		-
ug/L	< 1.0	-	-		-
ug/L	< 1.0	-	-		
ug/L	< 1.0	-	·	-	-
ug/L	< 1.0		_	_	
	< 1.0	-	_		
	< 1.0		_	-	-
ug/L	< 1.0	-	-	_	17.0
ug/L	< 1.0	-	gr - Carry	is an	44.0
	< 1.0	-			1.3
	< 1.0	-			
	< 1.0	-	-	_	1.2
			-		
		140.0	_		
					<u>_</u>
		-		· -	— <u> </u>
					
		_			
				11.0	13.0
_,					13.0
	ug/L ug/L ug/L ug/L ug/L	ug/L < 1.0	ug/L < 1.0	ug/L < 1.0	ug/L < 1.0

NA = Not analyzed

Analysis by USEPA SW-846 Method 8260B

Duplicate analytical results for surface water sampling conducted by k

[&]quot;-" = Results were below reporting limits

Table 6 Groundwater Analytical Results for Detected Inorganic Parameters October 2000 Safety-Kleen (Wichita) Facility

		·					SK-2D					· · · · · · · · · · · · · · · · · · ·	
Parameter Name	Units	Method	SK-1S	SK-1D	SK-2S	SK-2D	(DUP)	SK-3S	SK-3D	SK-4S	SK-5S	SK-5D	SK-6S
Inorganics		,					·						
Alkalinity, Bicarbonate	mg/L	310.1	252.0	238.0	445.0	325.0	NR	353.0	75.0	360.0	274.0	178.0	396.0
Alkalinity, Carbonate	mg/L	310.1	-	-	-	•	-		27.9	-		- 170.0	000.0
Alkalinity, Total	mg/L	310.1	252.0	238.0	445.0	325.0	NR	353.0	103.0	360.0	274.0	178.0	396.0
Calcium (Dissolved)	mg/L	6010B	116.0	108.0	135.0	141.0	h	128.0	65.5	128.0	102.0	70.1	110.0
Chloride	mg/L	325.2	58.8	84.5	122.0	65.8	NR	98.0	111.0	48.4	50.5	78.7	117.0
Iron (Dissolved)	mg/L	6010B	-	-	-	-	-	-	-	2.2		-	- 117.0
Iron (Total)	mg/L	_6010B	88.2 J	1.5 J	22.7 J	0.84 J	0.84 J	10.1 J	0.60 J	212 J	123 J	2.1 J	121 J
Magnesium (Dissolved)	mg/L	6010B	42.2	42.8	36.9	54.5	55.3	34.2	15.9	38.3	37.0	25.0	41.7
Manganese	mg/L	6010B	1.1	0.6	3.5	1.5	1.5	2.7	0.025 J	6.0	2.1	0.7	5.2
Manganese (Dissolved)	mg/L	6010B	0.1	0.6	3.1	1.6	1.6	2.0	0.11 J	3.2	1.0	0.6	2.8
Methane	ug/L	SOP-175	0.6	2.3	340.0	7.9	4.7	41.0	4.2	200.0	5.0	3.3	180.0
Nitrogen, Nitrate	mg/L	353.2	2.0	2.7	-	3.3	NR	0.8	2.0	0.8	6.3	7.0	-
Potassium (Dissolved)	mg/L	6010B	-	- 10.1	4.0	4.4	4.5	6.4	7.6	3.3	3.4	5.5	3.4
Sulfate	mg/L	375.4	244.0	296.0	76.0	268.0	NR	163.0	142.0	143.0	153.0	121.0	105.0
Total Dissolved Solids	mg/L	160.1	934.0	906.0	878.0	927.0	NR	810.0	510.0	540.0	796.0	586.0	850.0
Total Organic Carbon	mg/L	415.1	1.2	2.2	3.1	2.2	NR	2.5	3.6	4.2	2.3	2.5	3.3

Notes:

N/A = Not analyzed

J = Value estimated due to quality control issues (see Data Validation discussion).

NR=Not Requested

Table 7 Groundwater Analytical Results -- Inorganic Parameters April 2001 Safety-Kleen (Wichita) Facility

Parameter Name	Units	Method	SK-1S	SK-1D	SK-2S	SK-2D	SK-3S	SK-3D	SK-3Z (DUP - 3D)	SK-4S	SK-4Z (DUP - 4S)
Inorganics			Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01
Alkalinity, Bicarbonate	mg/L	310.1	289.0	274.0	428.0	321.0	308.0	265.0	275.0	39.0	386.0
Alkalinity, Total	mg/L	310.1	289.0	274.0	428.0	321.0	308.0	265.0	275.0	383.0	386.0
Ammonia as N	mg/L	350.1		•	0.1	-	0.1	-	-	-	0.1
Calcium (Dissolved)	mg/L	6010B	116.0	160.0	145.0	146.0	110.0	109.0	103.0	144.0	143.0
Chloride	mg/L	325.2	69.0	53.3	109.0	65.0	61.5	53.0	53.4	32.0	32.3
Ethane	ug/L	SOP-175	-	-	-	- ,	-	-	-	-	-
Iron (Dissolved)	mg/L	6010B	-	-	-	-	1.4	-	-	-	-
Iron (Total)	mg/L	6010B	81.4	0.6	216.0	4.7	181.0	8.7	7.1	435.0	495.0
Magnesium (Dissolved)	mg/L	6010B	45.5	62.8	36.9	58.3	39.3	41.2	39.0	37.5	39.2
Manganese	mg/L	6010B	1.7	0.1	7.3	0.8	2.5	0.5	0.5	5.9	6.9
Manganese (Dissolved)	mg/L	6010B	0.9	0.1	3.0	0.7	1.0	0.4	0.3	1.9	1.9
Methane	ug/L	SOP-175	50.0	0.7	200 E	9.9	11.0	0.7	0.6	3.3	3.4
Methane D	ug/L	SOP-175	-	-	160 D	-	_	-	-	_	-
Nitrogen, Nitrate	mg/L	353.2	1.2	2.0	-	3.2	4.8	6.7	6.6	2.4	2.1
Potassium (Dissolved)	mg/L	6010B	-	3.1	3.5	-	3.9	- <u>-</u>	-	-	-
Sulfate	mg/L	375.4	261.0	391.0	138.0	316.0	183.0	195.0	174.0	172.0	200.0
Total Dissolved Solids	mg/L	160.1	1230.0	944.0	1090.0	972.0	829.0	736.0	738.0	1040.0	970.0
Total Organic Carbon	mg/L	415.1	1.8	1.2	3.3	1.1	3.9	1.3	1.4	5.9	4.0

Notes:

N/A = Not analyzed

J = Value estimated due to quality control issues (see Data Validation discussion).

NR=Not Requested

Table 7 Groundwater Analytical Results -- Inorganic Parameters April 2001 Safety-Kleen (Wichita) Facility

Davamatay Nama		***	01/ 50		01/ 00	D0014		UPMW-	UPMW-		
Parameter Name	Units	Method	SK-5S	SK-5D	SK-6S	RSCI-1	HRI-03	10	11	14	WND-32
Inorganics			Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01	Apr-01
Alkalinity, Bicarbonate	mg/L	310.1	500.0	299.0	445.0	328.0	298.0	450.0	116.0	459.0	321.0
Alkalinity, Total	mg/L	310.1	500.0	299.0	445.0	328.0	298.0	450.0	116.0	459.0	321.0
Ammonia as N	mg/L	350.1	0.2	<u>- </u>	_	-	-	0.3	0.1	0.4	0.2
Calcium (Dissolved)	mg/L	6010B	136.0	122.0	118.0	135.0	123.0	98.8	287.0	119.0	124.0
Chloride	mg/L	325.2	136.0	54.8	77.4	77.9	60.7	53.3	6.7	51.1	108.0
Ethane	ug/L	SOP-175	-	-	-	-	-	0.8	-	-	-
Iron (Dissolved)	mg/L	6010B	1.2	-	-	-	0.3	1.2	-	6.8	-
Iron (Total)	mg/L	6010B	48.9	1.3	123.0	12.8	4.6	188.0	152.0	285.0	51.8
Magnesium (Dissolved)	mg/L	6010B	37.4	49.1	43.9	53.2	45.4	27.1	19.1	31.1	31.8
Manganese	mg/L	6010B	3.9	0.5	6.2	0.9	1.0	3.8	1.4	5.7	4.9
Manganese (Dissolved)	mg/L	6010B	2.7	0.6	3.0	0.2	0.0	1.1	-	2.8	2.0
Methane	ug/L	SOP-175	210 E	1.2	9.8	0.9	0.8	520 E	1.4	420 E	3.0
Methane D	ug/L	SOP-175	170 D	-	-	-	-	1300 D	-	850 D	-
Nitrogen, Nitrate	mg/L	353.2	-	4.6	1.4	3.4	2.6	- · ·	2.4	-	6.7
Potassium (Dissolved)	mg/L	6010B	4.2	-	3.1	3.5	-	-	3.0	-	5.1
Sulfate	mg/L	375.4	33.5	228.0	107.0	228.0	229.0	10.3	741.0	29.0	164.0
Total Dissolved Solids	mg/L	160.1	928.0	878.0	1020.0	862.0	781.0	592.0	313.0	488.0	693.0
Total Organic Carbon	mg/L	415.1	2.9	1.4	2.7	2.0	3.9	14.6	10.9	12.9	7.4

Notes:

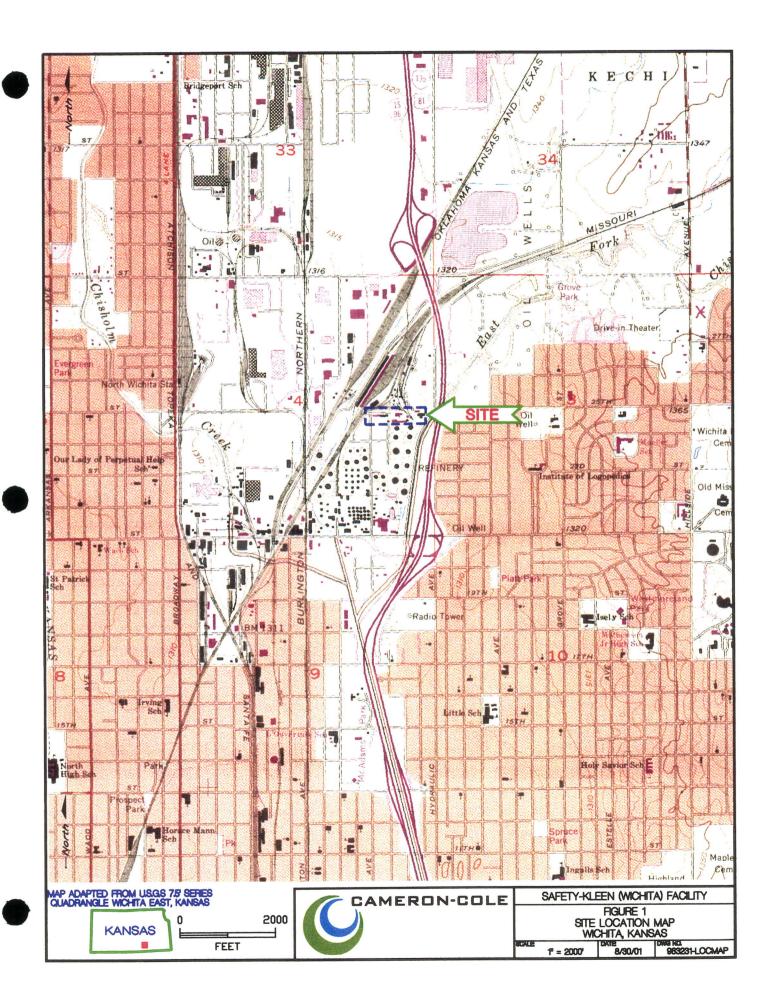
N/A = Not analyzed
J = Value estimated due to quality control issues (see NR=Not Requested

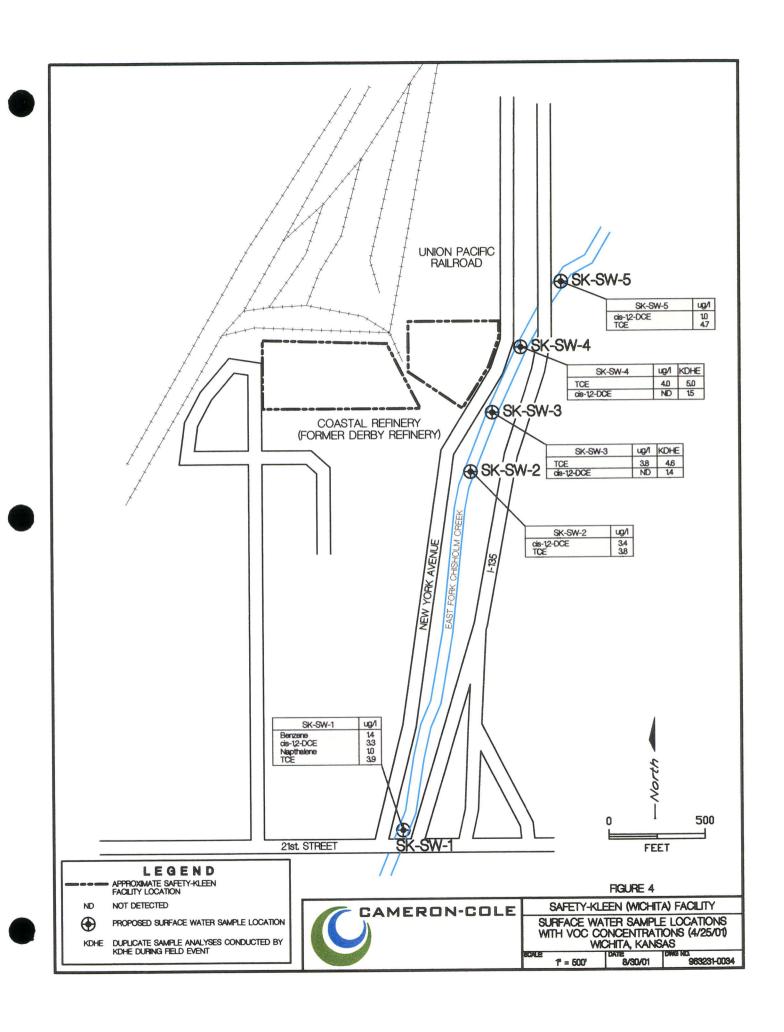
Table 8
Groundwater Analytical Results for Selected Offsite Wells and Geoprobe Locations
Safety-Kleen (Wichita) Facility

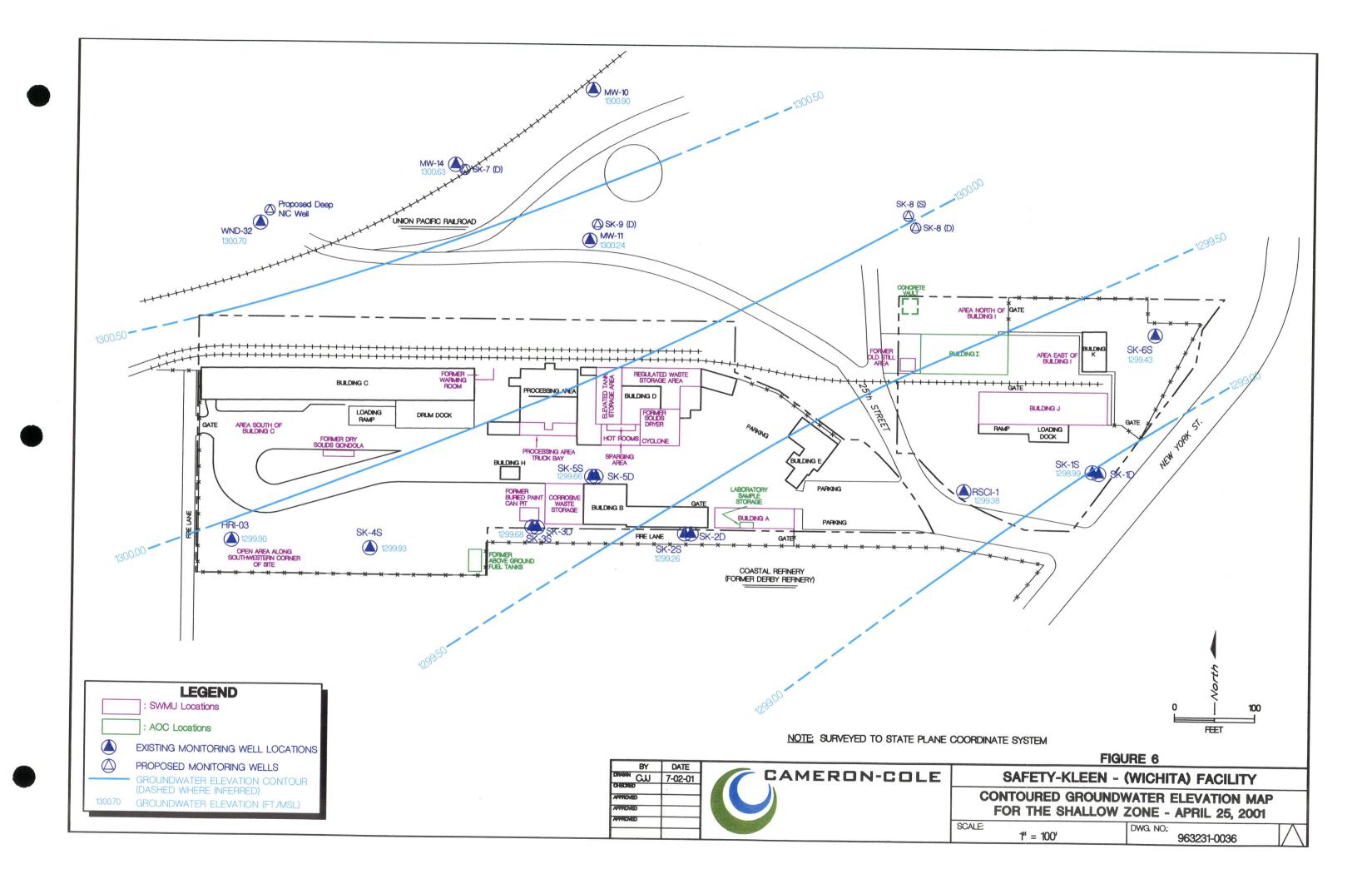
		GP10F-02 March 10, 2000		GP10F-03 March 9, 2000			GP10F-04 March 9, 2000	•				*
l		(CDM)	(CDM)	(CDM)	(CDM)	(CDM)	(SKC)	(CDM)	(SKC)	(CDM)	(SKC)	(CDM)
Parameter	Units	24-26'	26-35'	15-17'	24-26'	26-36'	18-20'	18-20'	24-26'	24-26'	33-35'	33-35'
1,1,1-Trichloroethane	ug/L	-	-	2.7	-	-	-	-		_	-	_
1,1,2-Trichloroethane	ug/L	•	-	2	•	-	-	-	-	-		
1,1-Dichloroethane	ug/L	-	-	1.7	-	-	-	1.1	-	5.1	•	2.8
1,1-Dichloroethene	ug/L	-	-	-	-	-	-	-	-	2.8		
1,2-Dichloroethane	ug/L	-		1.4	-	-	-	-	_	2.2	_	
2,2-Dichloropropane	ug/L	-	_	-	-	-		<u>-</u>	-			
Benzene	ug/L	-	-	32	26	1.3	410	310	-	24	-	3.1
Carbon tetrachloride	ug/L	-	-	20	15	2.2			_			
Chloroethane	ug/L	-	-	-	-	-	-	-		1.2		
Chloroform	ug/L	-	•	28	15	2	-		-			
cis-1,2-Dichloroethene	ug/L	1.5	29	26	16	21	-	4.6	36	36	60	54
Ethylbenzene	ug/L	-	-	-	•	-	670	380 .		23		1.5
Methylene chloride	ug/L	-	-	1.5	-	-	-	-	_		-	
m-Xylene & p-Xylene	ug/L	-	-	-	-	-	110	63	-	4.3	•	_
Naphthalene	ug/L	-	-	-	-	-	170	•	_	-		
n-Propylbenzene	ug/L	-	-	-	•	-	100					
o-Xylene	ug/L	-	-	-	-	-	-	6.1	_		-	
Tetrachloroethene	ug/L	-	1.8	52	7.1	1.7	•	-	76	70		1.6
Toluene	ug/L	-	-	-	-	-	-	28	-	1.8		, 1.0
trans-1,2-Dichloroethene	ug/L	-	3.2	1.3	-	2.2			-	2.6		2
Trichloroethene	ug/L	-	130	70	68	70	-	-	•	37		8.3
Vinyl chloride	ug/L	-	•	1.6			† <u>.</u>	1.7		6.7		13

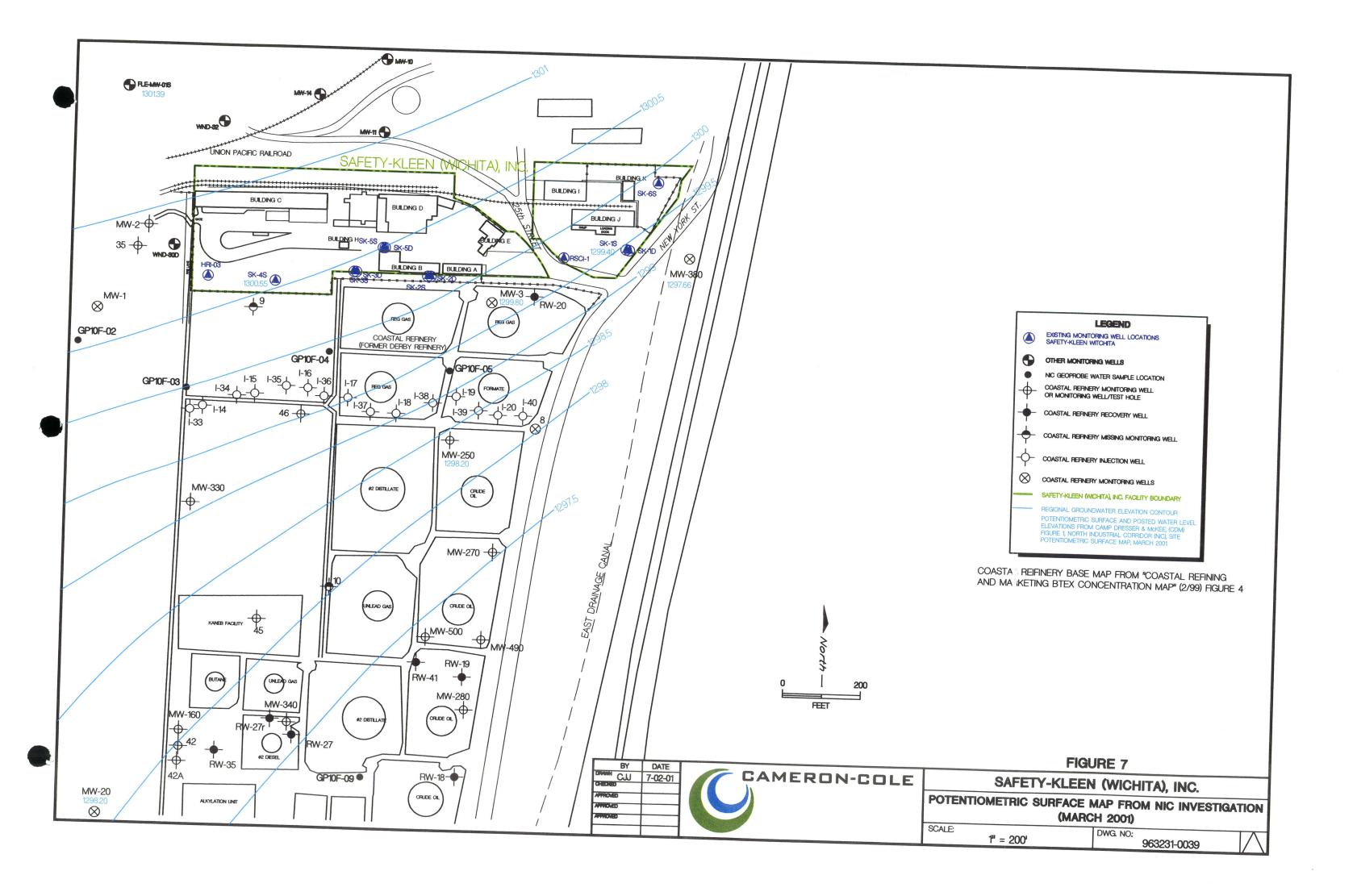
Table 8
Groundwater Analytical Results for Selected Offsite Wells and Geoprobe Locations
Safety-Kleen (Wichita) Facility

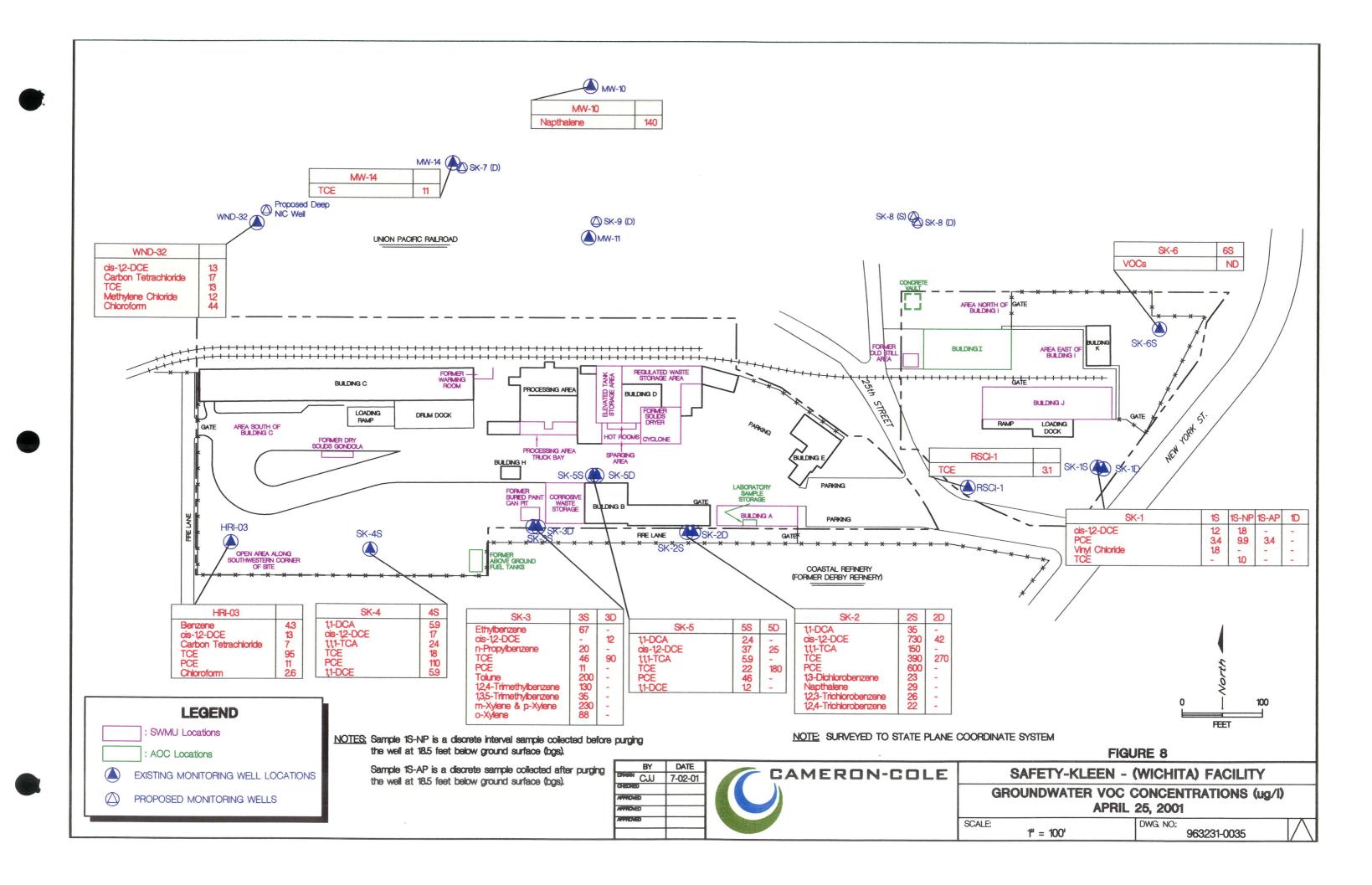
	GP10F-05 March 9, 2000									
	(SKC)	(CDM)	(SKC)	(CDM)	(SKC)	(CDM)	MW-1	MW-3	MW-380	RW-20
Parameter	15-17'	15-17'	21-24'	21-24'	32-35'	32-35	July 6, 2000	July 6, 2000	July 6, 2000	
1,1,1-Trichloroethane	-	-	-	11	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-	-	-	•
1,1-Dichloroethane	-	5.3	-	8.6	-	-	-	-	2.9	-
1,1-Dichloroethene	-	-		-		•		-		
1,2-Dichloroethane	-	45	_	-	-	-	-	-	-	
2,2-Dichloropropane	•	-	-	-	-	-	-	2.7	-	-
Benzene	2700	1500	38	40	-	2	-	-	-	-
Carbon tetrachloride	-	-	-	-	-	-	-	-	-	_
Chloroethane	-	-	-	-	-	-	-	-	-	_
Chloroform		-	-	1.6	-	-		-	-	
cis-1,2-Dichloroethene	-	-	-	2.4	44	42		14	4.5	2.2
Ethylbenzene	330	250	59	4.6	-	-		-	_	
Methylene chloride	-	-	-	_	-	-	-	-	-	-
m-Xylene & p-Xylene	230	210	-	-	-	-	-			
Naphthalene	190	-	* -	-	-		-	-	-	-
n-Propylbenzene	100	-	-	-	-	-	-			
o-Xylene	-	18	-	-	-	-	-	-	-	_
Tetrachloroethene	-	-	•	-		3.5	-		4.2	1.2
Toluene	120	85	•	2.5	-	-	-	-	-	-
trans-1,2-Dichloroethene	•	-		-	-	4.5	-	-	-	
Trichloroethene	-	-		3.9	310	260	-	-	1.3	3.6
Vinyl chloride	-	-	-	3.1	-	-	-	-	-	

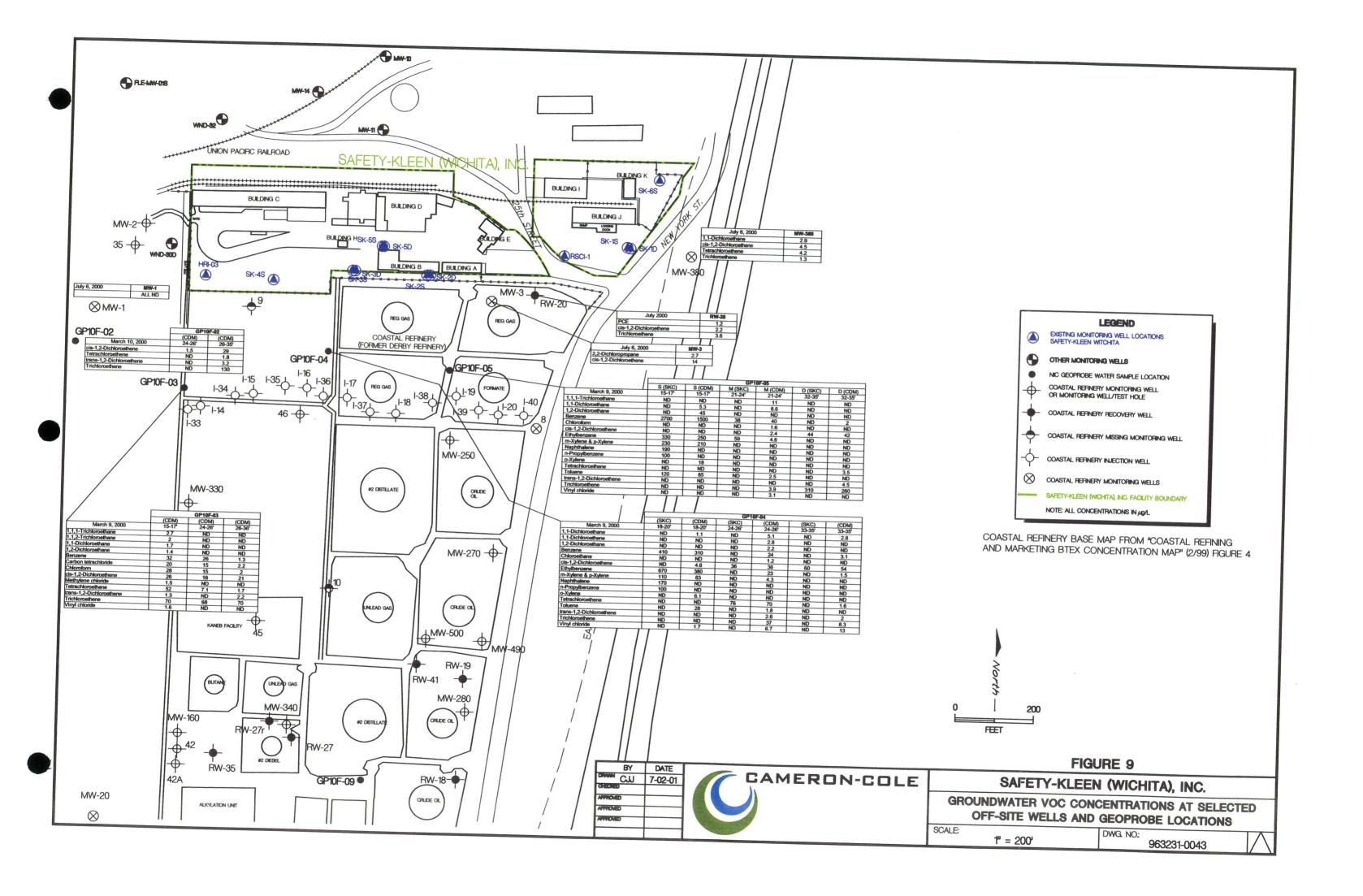


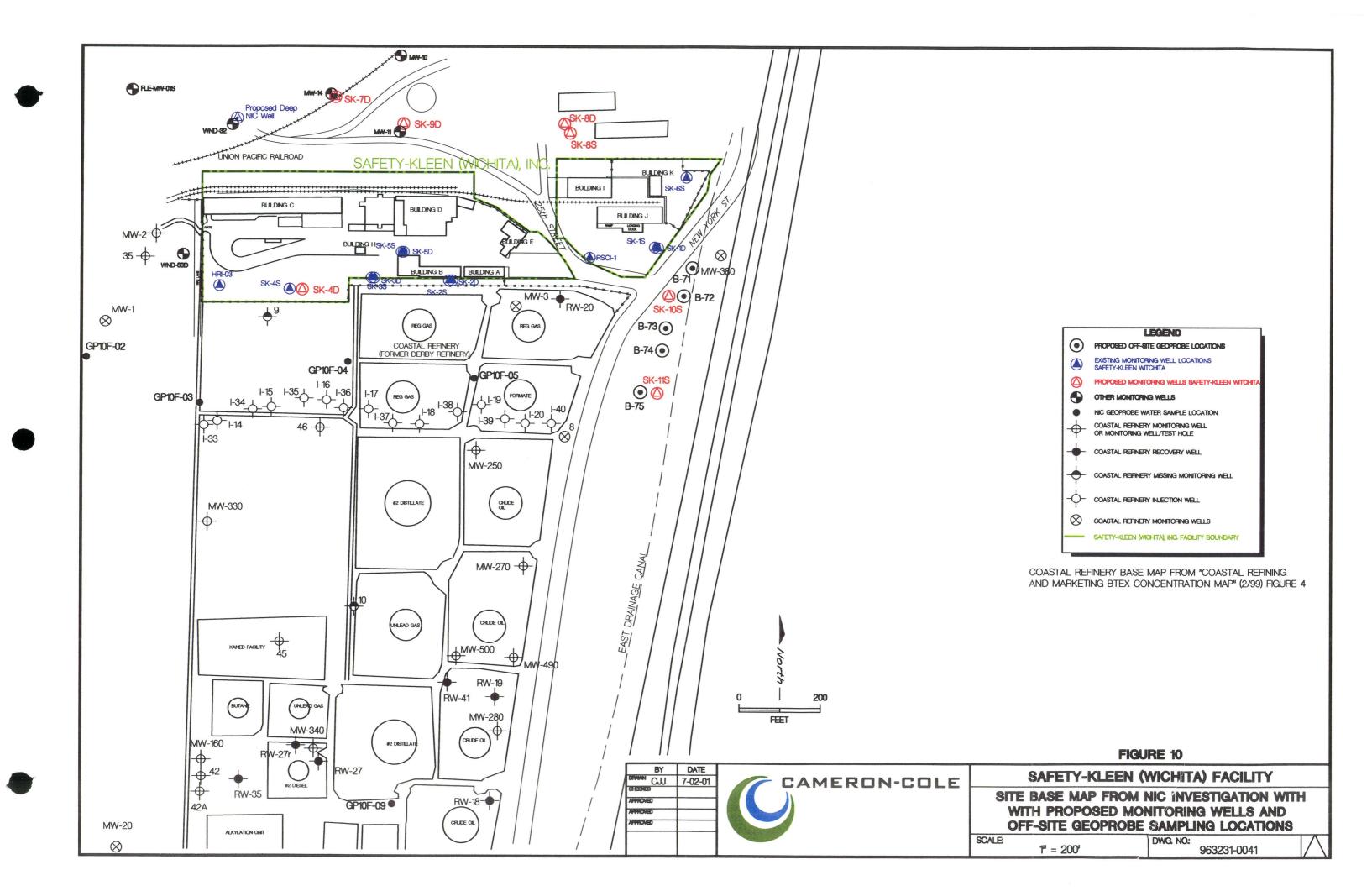












VALIDATION OF LABORATORY RESULTS

SAFETY- KLEEN WICHITA GROUNDWATER INVESTIGATION

SEVERN TRENT LABORATORY (STL) PROJECT NUMBER D1K070112

CAMERON-COLE PROJECT # 1205 - PHASE 2

Detailed in the following pages is the data validation for 10 groundwater samples collected as part of a GeoProbe® drive point investigation conducted at the Safety-Kleen (S-K) Wichita Facility on November 6, 2001. The samples were collected and analyzed in accordance with the specifications and procedures described in the RCRA Facility Investigation (RFI) Phase I Work Plan (S-K, October 14, 1999) and the subsequent Groundwater Monitoring Work Plan Addendums. The following groundwater samples were collected:

Groundwater Samples

B-71D	B-71S	B-72S	B-72D	B-73S	B-73D
B-74S	B-74D	B-75S	B-75D	•	

Quality Control Samples

A trip blank was submitted with the groundwater samples for analysis. However, the groundwater samples were requested for analysis on a 24 hour rush turnaround basis, and the trip blank was not. Therefore, results for the trip blank are not available.

The samples were submitted to Severn Trent Laboratory (STL) located in Arvada, Colorado. Samples were shipped by overnight courier and were received at the laboratory in one cooler on November 7, 2001, at acceptable temperatures 5.1 degrees Celsius.

Results of the analyses are provided in STL Laboratory Report D1K070112.

The samples were submitted for analysis of Volatile Organic Compounds (VOCs) by EPA method 8260B.

Review of this data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the RFI Work Plan, guidance provided in the most recent version of the USEPA Contract Laboratory Program (CLP) Documents providing "National Functional Guidelines for Organic Data Review", and by the professional judgment of a geochemist experienced in the data validation and evaluation process.

COMPARISON OF REQUESTED AND PERFORMED ANALYSES

The groundwater samples submitted under the chain-of-custody (COC) were analyzed and reported as requested. Samples listed on the COC for non-rush analysis are not evaluated herein. Results for these analyses will be reported under separate cover.

HOLDING TIME COMPLIANCE

The samples were collected on November 6, 2001 and were analyzed the following day on November 7, 2001. All analyses were completed within proper 14 day holding time for preserved VOCs.

BLANKS

Results from two method blanks were provided in support of the VOC analyses. No VOCs were detected in the method blanks.

SURROGATE RECOVERIES

STL provided recovery results for four surrogate compounds spiked into each sample requiring VOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 86 to 113 percent.

LABORATORY CONTROL SAMPLES

Results from two sets of laboratory control sample (LCS) and LCS duplicate (LCSD) analyses were provided in support of the VOC analyses (analyzed November 7 and 8, 2001). LCS recoveries ranged from 93 to 104 percent. Precision between the LCS and LCSD recoveries was acceptable, with a maximum relative percent difference (RPD) of 3.7 percent (RPD control limit of 20 percent).

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

Results from two sets of batch specific matrix spike (MS) and matrix spike duplicate (MSD) analyses were provided in support of the VOC analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable, with one exception. MS recoveries ranged from 76 to 101 percent. The 76 percent MS recovery for benzene in the November 8, 2001 spike is below the lower control limit of 79 percent. No action is taken based on the single low MS recovery, as VOCS are not qualified based on MS recoveries alone, and all other associated QC meet required control limits. The maximum RPD between spike recoveries was 4.8 percent (RPD control limit of 20 percent).

LABORATORY AND FIELD DUPLICATE SAMPLE ANALYSES

Laboratory duplicate analyses were not performed or required. Field duplicate samples were not collected

RESULTS QUANTITATION

STL reported VOC concentrations for sample S-74S from a five fold dilution. Results for sample B-75S were reported from a four fold dilution. Reporting limits are acceptable. No anomalies were noted with results quantitation for the sample submitted.

OVERALL DATA ASSESSMENT

The analytical data quality for samples and analyses listed on page 1 this validation report have been validated in accordance with the procedures described herein. Analytical results were provided in STL Report Number D1K070112 dated November 12, 2001.

All analytical results were found to be quantitative, with no data qualification required.

VALIDATION PERFORMED BY:

William W. Huskie, Consulting Geochemist

SIGNATURE:

William W. Huskis

DATE: November 15, 2001

D:\sk\wichita\Novem_DP_GW_VaL.doc

VALIDATION OF LABORATORY RESULTS

SAFETY- KLEEN WICHITA RFI INVESTIGATION

SEVERN TRENT LABORATORY (STL) PROJECT NUMBER D1K150281

CAMERON-COLE PROJECT # 1205 - PHASE 2

Detailed in the following pages is the data validation for five groundwater samples and 15 soil samples (and four associated quality control soil samples) collected in the vicinity of the Safety-Kleen (S-K) Wichita Facility on November 12, 2001. The samples were collected and analyzed in accordance with the specifications and procedures described in the RCRA Facility Investigation (RFI) Phase I Work Plan (S-K, October 14, 1999) and subsequent Groundwater Monitoring Work Plan Addendums. The following groundwater, soil, and QC samples were collected:

Groundwater Samples

B-68-19	B-77-19	B-63-20	B-80-17	B-83-17	
Soil Samples					
B-68-4 B-59-3 B-80-15	B-68-16 B-59-15 B-83-1	B-69-3 B-63-0.5 B-83-15	B-69-15 B-63-11	B-77-5 B-63-19	B-77-16 B-80-1

Quality Control Samples

B-105-16 (blind duplicate of primary soil sample B-68-16)

B-107-3 (blind duplicate of primary groundwater sample B-69-3)

B-108-16 (blind duplicate of primary groundwater sample B-77-16)

B-109-15 (blind duplicate of primary groundwater sample B-80-15)

The samples were submitted to Severn Trent Laboratory (STL) located in Arvada, Colorado. Samples were shipped by overnight courier on November 12, 2001 and were received at the laboratory in good condition on November 14, 2001, at acceptable temperatures ranging from 5.3 to 5.8 degrees Celsius.

Results of the analyses are provided in STL Laboratory Report D1K150281 dated December 6, 2001 and a revised STL report dated January 15, 2002.

The samples were tested for the analytes listed in the following Table in accordance with United States Environmental Protection Agency (USEPA) SW-846 methodologies,

Standard Methods for Analysis of Water and Wastes, and as described in Table 5 of the RFI Work Plan.

Note that analyses for bis(2-ethylhexyl)phthalate and for dimethyl phthalate were not requested as part of the initial semivolatile organic compound (SVOC) analyses. These compounds were added to the SVOC analyte list after the initial reports were provided. These data are included in the revised reports.

Analysis Requested	Analytical Method	Samples Analyzed
Volatile Organic Compounds (VOCs)	Method 8260B	All samples listed on page 1 except for B-68-16 and B-105-16 (duplicate pair)
Semi-Volatile Organic Compounds (SVOCs)	Method 8270C (short list)	B-68-4, B-68-16, and B-105-16
Total RCRA Metals	Method 6010B (7471 for mercury)	B-68-4, B-68-16, B-69-3, B-69-15, B-105-16, B-63-0.5, B-63-11, and B-63-19

Review of this data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the RFI Work Plan, guidance provided in the most recent version of the USEPA Contract Laboratory Program (CLP) Documents providing "National Functional Guidelines for Inorganic and Organic Data Review", and by the professional judgment of a geochemist experienced in the QA/QC evaluation process.

COMPARISON OF REQUESTED AND PERFORMED ANALYSES

The soil and groundwater samples submitted under the COC associated with this validation were analyzed and reported as requested, with the exception noted for the addition of phthalate analyses required for the two soil samples analyzed for SVOCs. Also note that sample B-83-17 was listed on the COC as a soil sample, and should have been listed as a groundwater sample.

HOLDING TIME COMPLIANCE

The samples were collected on November 12, 2001 and arrived at the laboratory within two days of collection. Samples submitted for analysis of VOCs were analyzed within the required 14 day holding time. SVOC samples were extracted within 14 days and analyzed within 40 days of extraction. Metals analyses were completed within 180 days (28 days for mercury). All analyses were completed within proper holding times for the methods requested.

BLANKS

VOCs - Results from three method blanks were provided in support of both the soil and groundwater analyses. No VOCs were detected in the method blanks.

SVOCs - Results from one method blank were provided in support of the soil analyses. No SVOCs were detected in the method blank.

Metals - Results from one method blank were provided in support of the soil analyses. No metals were detected in the method blank.

SURROGATE RECOVERIES

VOCS - STL provided recovery results from four surrogate compounds spiked into each sample requiring VOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 88 to 114 percent.

SVOCS - STL provided recovery results from six surrogate compounds spiked into each sample requiring SVOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 53 to 84 percent.

LABORATORY CONTROL SAMPLES

VOCs - Results from three sets of laboratory control sample (LCS) and LCS duplicate analyses were provided in support of the VOC analyses. LCS recoveries were acceptable, ranging from 82 to 105 percent. Precision between the results of the LCS and LCS duplicate analyses was acceptable with a maximum RPD of 6.5 percent for chlorobenzene.

SVOCs - Results from one LCS analysis were provided with recoveries ranging from 67 to 74 percent. No LCS duplicate was performed. Accuracy, as demonstrated by these analyses, is acceptable.

Metals – Results from one LCS analysis were provided in support of the total metals analyses. Metals LCS recoveries were acceptable, ranging from 90 to 103 percent. Results from an LCS/LCSD pair were provided in support of the mercury analyses. The RPD between mercury results was 0.45 percent. Precision and accuracy, as demonstrated by these analyses, is acceptable.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

VOCs - Results from one set of project specific (B-68-4) matrix spike (MS) and matrix spike duplicate (MSD) analyses were provided in support of the VOC analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable, with recoveries ranging from 80 to 105 percent. The maximum RPD between VOC spike results was 9.7 percent for TCE. Results from two additional batch specific MS and MSD pairs were provided. Precision and accuracy, as demonstrated by these analyses, is acceptable, with the following exception. The TCE recovery for one MS was low at 77 percent (lower control limit of 81 percent). No action is taken based on the single low TCE spike recovery, as associated LCS recoveries demonstrate acceptable accuracy.

SVOCs - Results from one set of batch specific MS and MSD analyses were provided in support of the SVOC analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable, with recoveries ranging from 58 to 70 percent. The maximum RPD between SVOC spike results was 7.0 percent for pyrene.

Metals - Results from one set of batch specific MS and MSD analyses were provided in support of the total metals. Spike recoveries were acceptable, ranging from 90 to 102 percent. The maximum RPD between MS results was 2.2 percent for chromium.

FIELD DUPLICATE SAMPLE ANALYSES

The following field duplicate pairs were collected for the analyses listed below.

B-105-16 (blind duplicate of primary soil sample B-68-16) - Metals and SVOCs

B-107-3 (blind duplicate of primary groundwater sample B-69-3) - VOCs

B-108-16 (blind duplicate of primary groundwater sample B-77-16) - VOCs

B-109-15 (blind duplicate of primary groundwater sample B-80-15) - VOCs

Precision is evaluated as follows:

VOCs – Three of the duplicate pairs were analyzed for VOCs. VOCs were not detected in either sample of the three duplicate pairs (with one exception) and precision is determined to be acceptable. PCE was detected in sample B-107-3 at 9.5 mg/Kg. PCE was not detected in sample B-69-3 at < 5 mg/Kg. Because results agree within one reporting limit increment, no action is taken, and precision is determined to be acceptable.

SVOCs – Bis(2-ethylhexyl)phthalate was detected in both samples of the duplicate pair (B-68-16 and B-105-16) at concentrations of 630 and 650 mg/Kg, respectively. Precision between these detection is acceptable.

Metals – Arsenic, lead, barium, and chromium were detected in duplicate sample B-105-16. Lead, barium, and chromium were detected in the primary sample (B-68-16). Precision between these detection was acceptable, with a maximum RPD of 47 percent for barium. Arsenic results agree within on reporting limit increment.

RESULTS QUANTITATION

No anomalies were note with respect to results quantitation.

OVERALL DATA ASSESSMENT

The analytical data quality for samples and analyses listed on pages 1 and 2 of this validation report have been validated in accordance with the procedures described herein. Results were provided in STL report D1K150281 dated December 6, 2001, and revised January 15, 2002.

All analytical results were found to be quantitative, with no data qualification required.

Prepared By:_

William W. Huskie Geochemist

February 11, 2002

Date

D:\sk\wichita\STL_281_GW_soil.doc

VALIDATION OF LABORATORY RESULTS

SAFETY- KLEEN WICHITA RFI INVESTIGATION

SEVERN TRENT LABORATORY (STL) PROJECT NUMBER D1K120155

CAMERON-COLE PROJECT # 1205 - PHASE 2

Detailed in the following pages is the data validation for two groundwater samples and 21 soil samples collected in the vicinity of the Safety-Kleen (S-K) Wichita Facility on November 6, 7, and 8, 2001. The samples were collected and analyzed in accordance with the specifications and procedures described in the RCRA Facility Investigation (RFI) Phase I Work Plan (S-K, October 14, 1999) and subsequent Groundwater Monitoring Work Plan Addendums. The following groundwater and soil samples were collected:

Groundwater Samples

B-45-15 B-46-17

Soil Samples

B-49-4	B-49-15	B-55-17	B-55-3	B-45-4	B-45-14
B-45-15	B-46-2	B-46-13	B-46-17	B-70-18	B-76-4
B-76-16	B-57-4	B-57-15	B-58-4	B-58-16	B-52-4
B-52-15	B-51-4	B-51-15			

The samples were submitted to Severn Trent Laboratory (STL) located in Arvada, Colorado. Samples were shipped by overnight courier on November 9, 2001 and were received at the laboratory in good condition on November 10, 2001, at acceptable temperatures ranging from 2.7 to 4.5 degrees Celsius.

Results of the analyses are provided in STL Laboratory Report D1K150155 dated December 4, 2001 and a revised STL report dated January 15, 2002.

The samples were tested for the analytes listed in the following Table in accordance with United States Environmental Protection Agency (USEPA) SW-846 methodologies, Standard Methods for Analysis of Water and Wastes, and as described in Table 5 of the RFI Work Plan.

Note that analyses for bis(2-ethylhexyl)phthalate and for dimethyl phthalate were not requested as part of the initial semivolatile organic compound (SVOC) analyses. These compounds were added to the SVOC analyte list after the initial reports were provided. These data are included in the revised reports.

Analysis Requested	Analytical Method	Samples Analyzed
Volatile Organic Compounds (VOCs)	Method 8260B	All soil and groundwater samples listed on page 1 of this report.
Semi-Volatile Organic Compounds (SVOCs)	Method 8270C (short list)	B-49-4, and B-49-15.
Total RCRA Metals	Method 6010B (7471 for mercury)	B-70-18

Review of this data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the RFI Work Plan, guidance provided in the most recent version of the USEPA Contract Laboratory Program (CLP) Documents providing "National Functional Guidelines for Inorganic and Organic Data Review", and by the professional judgment of a geochemist experienced in the QA/QC evaluation process.

COMPARISON OF REQUESTED AND PERFORMED ANALYSES

The soil and groundwater samples submitted under the COC associated with this validation were analyzed and reported as requested, with the exception noted for the addition of phthalate analyses required for the two soil samples analyzed for SVOCs.

HOLDING TIME COMPLIANCE

The samples were collected on November 6, 7, and 8, 2001 and arrived at the laboratory within four days of collection. Samples submitted for analysis of VOCs were analyzed within the required 14 day holding time. SVOC samples were extracted within 14 days and analyzed within 40 days of extraction. Metals analyses were completed within 180 days (28 days for mercury). All analyses were completed within proper holding times for the methods requested.

BLANKS

VOCs - Results from five method blanks were provided in support of both the soil and groundwater analyses. No VOCs were detected in the method blanks.

SVOCs - Results from one method blank were provided in support of the soil analyses. No SVOCs were detected in the method blank.

Metals - Results from one method blank were provided in support of the soil analyses. No metals were detected in the method blank.

SURROGATE RECOVERIES

VOCS - STL provided recovery results from four surrogate compounds spiked into each sample requiring VOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 85 to 125 percent.

SVOCS - STL provided recovery results from six surrogate compounds spiked into each sample requiring SVOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 56 to 79 percent.

LABORATORY CONTROL SAMPLES

VOCs - Results from five sets of laboratory control sample (LCS) and LCS duplicate analyses were provided in support of the VOC analyses. LCS recoveries were acceptable, ranging from 82 to 110 percent. Precision between the results of the LCS and LCS duplicate analyses was acceptable with a maximum RPD of 8.1 percent for TCE.

SVOCs - Results from one LCS analysis were provided with recoveries ranging from 67 to 74 percent. No LCS duplicate was performed. Accuracy, as demonstrated by this analysis, is acceptable.

Metals - One set of LCS and LCS duplicate analysis were provided in support of the total metals analyses. Metals LCS recoveries were acceptable, ranging from 94 to 102 percent. The maximum RPD between LCS and LCS duplicate results was 3.6 percent for mercury. Precision and accuracy, as demonstrated by these analyses, is acceptable.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

VOCs - Results from two sets of batch specific, and from three sets of project specific (samples B-57-15, B-76-16, and B-46-17) matrix spike (MS) and matrix spike duplicate (MSD) analyses were provided in support of the VOC analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable, with the following exceptions. MS recoveries for the spike of sample B-57-15, and for the batch 132350 spike were low, ranging from 59 to 72 percent. No action is taken, as acceptable precision and accuracy are demonstrated by the results of the associated LCS and LCSD analyses.

Metals - Results from one set of batch specific MS and MSD analyses were provided in support of the total metals. Spike recoveries were acceptable, ranging from 89 to 98 percent. The maximum RPD between MS results was 9.7 percent for mercury.

FIELD DUPLICATE SAMPLE ANALYSES

Field duplicate samples were not collected with the samples submitted under this chain-of-custody

RESULTS QUANTITATION

No anomalies were note with respect to results quantitation.

OVERALL DATA ASSESSMENT

The analytical data quality for samples and analyses listed on pages 1 and 2 of this validation report have been validated in accordance with the procedures described herein. Results were provided in STL report D1K150155 dated December 4, 2001, and revised January 15, 2002.

All analytical results were found to be quantitative, with no data qualification required

Prepared By: William W. Mushie

William W. Huskie

Geochemist

February 10, 2002

Date

D:\sk\wichita\STL_155_GW_soil.doc

VALIDATION OF LABORATORY RESULTS

SAFETY- KLEEN WICHITA RFI INVESTIGATION

SEVERN TRENT LABORATORY (STL) PROJECT NUMBER D1K120233

CAMERON-COLE PROJECT # 1205 - PHASE 2

Detailed in the following pages is the data validation for three groundwater samples and 14 soil samples (and associated quality control samples) collected in the vicinity of the Safety-Kleen (S-K) Wichita Facility on November 8 and 9, 2001. The samples were collected and analyzed in accordance with the specifications and procedures described in the RCRA Facility Investigation (RFI) Phase I Work Plan (S-K, October 14, 1999) and subsequent Groundwater Monitoring Work Plan Addendums. The following groundwater, soil, and QC samples were collected:

Groundwater Samples

B-79-20	B-81-20	B-102-18			
Soil Sample	<u>s</u>				
B-64-0.5 B-66-0.5	B-64-3 B-66-3	B-64-16 B-66-16	B-65-0.5 B-67-0.5	B-65-3 B-67-3	B-65-16 B-67-16
B-100-4	B-100-15				4.4

Quality Control Samples

B-100-4 (blind duplicate of primary soil sample B-50-4)

B-100-15 (blind duplicate of primary soil sample B-50-15)

B-102-18 (blind duplicate of primary groundwater sample B-56-18)

Note that results for all three primary soil samples are found in STL report D1K120137.

The samples were submitted to Severn Trent Laboratory (STL) located in Arvada, Colorado. Samples were shipped by overnight courier on November 9, 2001 and were received at the laboratory in good condition on November 10, 2001, at acceptable temperatures ranging from 2.7 to 4.5 degrees Celsius.

Results of the analyses are provided in STL Laboratory Report D1K150233 dated December 5, 2001 and a revised STL report dated January 15, 2002.

The samples were tested for the analytes listed in the following Table in accordance with United States Environmental Protection-Agency (USEPA) SW-846 methodologies,

Standard Methods for Analysis of Water and Wastes, and as described in Table 5 of the RFI Work Plan.

Note that analyses for bis(2-ethylhexyl)phthalate and for dimethyl phthalate were not requested as part of the initial semivolatile organic compound (SVOC) analyses. These compounds were added to the SVOC analyte list after the initial reports were provided. These data are included in the revised reports.

Analysis Requested	Analytical Method	Samples Analyzed
Volatile Organic Compounds (VOCs)	Method 8260B	B-79-20, B-81-20, B-100-4, B-100-15, and B-102-18
Semi-Volatile Organic Compounds (SVOCs)	Method 8270C (short list)	B-100-4 and B-100-15
Total RCRA Metals	Method 6010B (7471 for mercury)	B-64-0.5, B-64-3, B-64-16, B-65-0.5, B-65-3, B-65-16, B-66-0.5, B-66-3, B-66-16, B-67-0.5, B-67-3, and B-67-16

Review of this data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the RFI Work Plan, guidance provided in the most recent version of the USEPA Contract Laboratory Program (CLP) Documents providing "National Functional Guidelines for Inorganic and Organic Data Review", and by the professional judgment of a geochemist experienced in the QA/QC evaluation process.

COMPARISON OF REQUESTED AND PERFORMED ANALYSES

The soil and groundwater samples submitted under the COC associated with this validation were analyzed and reported as requested, with the exception noted for the addition of phthalate analyses required for the two soil samples analyzed for SVOCs. Also note that sample B-102-18 was listed on the COC as a soil sample, and should have been listed as a groundwater sample.

HOLDING TIME COMPLIANCE

The samples were collected on November 8 and 9, 2001 and arrived at the laboratory within two days of collection. Samples submitted for analysis of VOCs were analyzed within the required 14 day holding time. SVOC samples were extracted within 14 days and analyzed within 40 days of extraction. Metals analyses were completed within 180 days (28 days for mercury). All analyses were completed within proper holding times for the methods requested.

VOCs - Results from method blanks were provided in support of both the soil and groundwater analyses. No VOCs were detected in the method blanks.

SVOCs - Results from one method blank were provided in support of the soil analyses. No SVOCs were detected in the method blank.

Metals - Results from one method blank were provided in support of the soil analyses. No metals were detected in the method blank.

SURROGATE RECOVERIES

VOCS - STL provided recovery results from four surrogate compounds spiked into each sample requiring VOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 88 to 114 percent.

SVOCS - STL provided recovery results from six surrogate compounds spiked into each sample requiring SVOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 57 to 72 percent.

LABORATORY CONTROL SAMPLES

VOCs - Results from three sets of laboratory control sample (LCS) and LCS duplicate analyses were provided in support of the VOC analyses. LCS recoveries were acceptable, ranging from 82 to 110 percent. Precision between the results of the LCS and LCS duplicate analyses was acceptable with a maximum RPD of 6.9 percent for TCE.

SVOCs - Results from one LCS analysis were provided with recoveries ranging from 67 to 74 percent. No LCS duplicate was performed. Accuracy, as demonstrated by this analysis, is acceptable.

Metals - One set of LCS and LCSD analyses were provided in support of the total metals analyses. Metals LCS recoveries were acceptable, ranging from 91to 102 percent. The maximum RPD between metals results was 2.6 percent for selenium. Precision and accuracy, as demonstrated by these analyses, is acceptable.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

VOCs - Results from one set of batch specific matrix spike (MS) and matrix spike duplicate (MSD) analyses were provided in support of the VOC analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable, with recoveries ranging from 76 to 109 percent. The maximum RPD between VOC spike results was 12 percent for TCE.

Metals - Results from one set of batch specific MS and MSD analyses were provided in support of the total metals. Spike recoveries were acceptable, ranging from 76 to 93 percent. The maximum RPD between MS results was 7.9 percent for mercury.

FIELD DUPLICATE SAMPLE ANALYSES

The following field duplicate pairs were collected.

B-100-4 (blind duplicate of primary soil sample B-50-4)

B-100-15 (blind duplicate of primary soil sample B-50-15)

B-102-18 (blind duplicate of primary groundwater sample B-56-18)

Results for each of the primary samples are found in STL report D1K120137. Discussion of the duplicate precision is found in the validation letter for report D1K120137.

RESULTS QUANTITATION

No anomalies were note with respect to results quantitation.

OVERALL DATA ASSESSMENT

The analytical data quality for samples and analyses listed on pages 1 and 2 of this validation report have been validated in accordance with the procedures described herein. Results were provided in STL report D1K150233 dated December 5, 2001, and revised January 15, 2002.

All analytical results were found to be quantitative, with no data qualification required.

Prepared By: William W. Muskie

William W. Huskie

Geochemist

February 10, 2002

Date

D:\sk\wichita\STL 233_GW_soil.doc

VALIDATION OF LABORATORY RESULTS

SAFETY- KLEEN WICHITA RFI INVESTIGATION

SEVERN TRENT LABORATORY (STL) PROJECT NUMBER D1K120137

CAMERON-COLE PROJECT # 1205 - PHASE 2

Detailed in the following pages is the data validation for three groundwater samples and 21 soil samples (and associated quality control samples) collected in the vicinity of the Safety-Kleen (S-K) Wichita Facility on November 7 and 9, 2001. The samples were collected and analyzed in accordance with the specifications and procedures described in the RCRA Facility Investigation (RFI) Phase I Work Plan (S-K, October 14, 1999) and subsequent Groundwater Monitoring Work Plan Addendums. The following groundwater, soil, and QC samples were collected:

Groundwater Samples

B-56-18	B-48-18	B-50-18			
Soil Samples	-			•	
B-54-4 B-62-17 B-56-3	B-54-17 B-61-0.5 B-56-16	B-53-5 B-61-4 B-48-3	B-53-17 B-61-18 B-48-14	B-62-0.5 B-70-0.5 B-50-4	B-62-5 B-70-8 B-50-15
B-60-1	B-60-3	B-60-16	/		

Quality Control Samples

B-100-4 (blind duplicate of primary soil sample B-50-4)

B-100-15 (blind duplicate of primary soil sample B-50-15)

B-102-18 (blind duplicate of primary groundwater sample B-56-18)

Note that results for all three duplicate samples are found in STL report D1K120233.

The samples were submitted to Severn Trent Laboratory (STL) located in Arvada, Colorado. Samples were shipped by overnight courier on November 9, 2001 and were received at the laboratory in good condition on November 10, 2001, at acceptable temperatures ranging from 2.7 to 4.5 degrees Celsius.

Results of the analyses are provided in STL Laboratory Report D1K150137 dated December 5, 2001 and a revised STL report dated January 15, 2002.

The samples were tested for the analytes listed in the following Table in accordance with United States Environmental Protection Agency (USEPA) SW-846 methodologies, Standard Methods for Analysis of Water and Wastes, and as described in Table 5 of the RFI Work Plan.

Note that analyses for bis(2-ethylhexyl)phthalate and for dimethyl phthalate were not requested as part of the initial semivolatile organic compound (SVOC) analyses. These compounds were added to the SVOC analyte list after the initial reports were provided. These data are included in the revised reports.

Analysis Requested	Analytical Method	Samples Analyzed
Volatile Organic Compounds (VOCs)	Method 8260B	All soil and groundwater samples listed on page 1 of this report.
Semi-Volatile Organic Compounds (SVOCs)	Method 8270C (short list)	B-48-3, B-48-14, B-50-4, and B-50-15.
Total RCRA Metals	Method 6010B (7471 for mercury)	B-54-4, B-54-17, B-62-0.5, B-62-5, B-62-17, B-61-0.5, B-61-4, B-61-18, B-70-0.5, B-70-8, B-60-1, B-60-3, and B-60-16

Review of this data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the RFI Work Plan, guidance provided in the most recent version of the USEPA Contract Laboratory Program (CLP) Documents providing "National Functional Guidelines for Inorganic and Organic Data Review", and by the professional judgment of a geochemist experienced in the QA/QC evaluation process.

COMPARISON OF REQUESTED AND PERFORMED ANALYSES

The soil and groundwater samples submitted under the COC associated with this validation were analyzed and reported as requested, with the exception noted for the addition of phthalate analyses required for the two soil samples analyzed for SVOCs. All samples requiring SVOC analyses were initially listed on the COC form as requiring analysis of RCRA metals. This was corrected based on the bottles submitted, and the COC was revised with S-K approval.

HOLDING TIME COMPLIANCE

The samples were collected on November 7 and 9, 2001 and arrived at the laboratory within three days of collection. Samples submitted for analysis of VOCs were analyzed within the required 14 day holding time. SVOC samples were extracted within 14 days and analyzed within 40 days of extraction. Metals analyses were completed within 180 days (28 days for mercury). All analyses were completed within proper holding times for the methods requested.

BLANKS

VOCs - Results from four method blanks were provided in support of both the soil and groundwater analyses. No VOCs were detected in the method blanks.

SVOCs - Results from one method blank were provided in support of the soil analyses. No SVOCs were detected in the method blank.

Metals - Results from one method blank were provided in support of the soil analyses. No metals were detected in the method blank.

SURROGATE RECOVERIES

VOCS - STL provided recovery results from four surrogate compounds spiked into each sample requiring VOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 88 to 129 percent.

SVOCS - STL provided recovery results from six surrogate compounds spiked into each sample requiring SVOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 57 to 81 percent.

LABORATORY CONTROL SAMPLES

VOCs - Results from four sets of laboratory control sample (LCS) and LCS duplicate analyses were provided in support of the VOC analyses. LCS recoveries were acceptable, ranging from 86 to 114 percent. Precision between the results of the LCS and LCS duplicate analyses was acceptable with a maximum RPD of 10 percent for TCE.

SVOCs - Results from one LCS analysis were provided with recoveries ranging from 67 to 74 percent. No LCS duplicate was performed. Accuracy, as demonstrated by this analysis, is acceptable.

Metals - One LCS analysis was provided in support of the total metals analyses. Metals LCS recoveries were acceptable, ranging from 86 to 96 percent. Accuracy, as demonstrated by this analysis, is acceptable.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

VOCs - Results from two sets of batch specific, and two sets of project specific (samples B-61-18 and B-62-17) matrix spike (MS) and matrix spike duplicate (MSD) analyses were provided in support of the VOC analyses. Precision and accuracy, as determined by

the MS and MSD analyses, were acceptable, with recoveries ranging from 76 to 109 percent The maximum RPD between VOC spike results was 12 percent for TCE.

SVOCs - Results from one set of batch specific MS and MSD analyses were provided in support of the VOC analyses. Precision and accuracy, as determined by theses analyses was acceptable, with spike recoveries ranging from 58 to 70 percent. The maximum RPD was 5.6 percent for di-nitrotoluene

Metals - Results from one set of project specific (sample B-60-1) MS and MSD analyses were provided in support of the total metals. Spike recoveries were acceptable, ranging from 85 to 98 percent. The maximum RPD between MS results was 5.7 percent for chromium. Note that spike recoveries were not evaluated for lead and cadmium, as the native sample results were more than 4 times the spike added concentrations.

FIELD DUPLICATE SAMPLE ANALYSES

The following field duplicate pairs were collected.

B-100-4 (blind duplicate of primary soil sample B-50-4) VOCs and SVOCs B-100-15 (blind duplicate of primary soil sample B-50-15) VOCs and SVOCs B-102-18 (blind duplicate of primary groundwater sample B-56-18) VOCs

Results for each of the duplicate samples are found in STL report D1K120233. Duplicate precision for the SVOC analysis is acceptable, with no SVOCs detected in any samples

Precision between the PCE results in the B-16-18 and B-102-18 pair is poor, with TCE results of 8.9 ug/L and 1.6 ug/L respectively. Due top the poor precision, TCE results for these two sample are qualified as J/Estimated.

RESULTS QUANTITATION

No anomalies were note with respect to results quantitation.

OVERALL DATA ASSESSMENT

The analytical data quality for samples and analyses listed on pages 1 and 2 of this validation report have been validated in accordance with the procedures described herein. Results were provided in STL report D1K150137 dated December 5, 2001, and revised January 15, 2002.

All analytical results were found to be quantitative, with the exceptions detailed herein, and as summarized in the following table.

VALIDATION SUMMARY TABLE

Sample ID / Analyte	Data Qualifier	Reason for Qualification
B-102-18 and B-56-18 / Trichloroethene	J/Estimated	Poor Precision between results of field duplicate samples.

Prepared By: William W. Norskie

William W. Huskie

Geochemist

February 10, 2002 Date

VALIDATION OF LABORATORY RESULTS

SAFETY- KLEEN WICHITA RFI INVESTIGATION

SEVERN TRENT LABORATORY (STL) PROJECT NUMBER D1K120175

CAMERON-COLE PROJECT # 1205 - PHASE 2

Detailed in the following pages is the data validation for two groundwater samples and two soil samples (and four associated quality control soil samples) collected in the vicinity of the Safety-Kleen (S-K) Wichita Facility on November 8, 2001. The samples were collected and analyzed in accordance with the specifications and procedures described in the RCRA Facility Investigation (RFI) Phase I Work Plan (S-K, October 14, 1999) and subsequent Groundwater Monitoring Work Plan Addendums. The following groundwater, soil, and QC samples were collected:

Groundwater Samples

B-47-16

B-78-20

Soil Samples

B-47-3

B-47-14

Quality Control Samples

RB-118 (rinsate blanks sample)

TB-02 (trip blank)

TB-03 (trip blank)

The samples were submitted to Severn Trent Laboratory (STL) located in Arvada, Colorado. Samples were shipped by overnight courier on November 9, 2001 and were received at the laboratory in good condition on November 10, 2001, at acceptable temperatures ranging from 2.7 to 4.5 degrees Celsius.

Results of the analyses are provided in STL Laboratory Report D1K120175 dated December 5, 2001.

The samples were tested for the analytes listed in the following Table in accordance with United States Environmental Protection Agency (USEPA) SW-846 methodologies, Standard Methods for Analysis of Water and Wastes, and as described in Table 5 of the RFI Work Plan.

Analysis Requested	Analytical Method	Samples Analyzed
Volatile Organic Compounds (VOCs)	Method 8260B	All samples listed on page 1.

Review of this data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the RFI Work Plan, guidance provided in the most recent version of the USEPA Contract Laboratory Program (CLP) Documents providing "National Functional Guidelines for Inorganic and Organic Data Review", and by the professional judgment of a geochemist experienced in the QA/QC evaluation process.

COMPARISON OF REQUESTED AND PERFORMED ANALYSES

The soil and groundwater samples submitted under the COC associated with this validation were analyzed and reported as requested.

HOLDING TIME COMPLIANCE

The samples were collected on November 12, 2001 and arrived at the laboratory within two days of collection. Samples submitted for analysis of VOCs were analyzed within the required 14 day holding time.

BLANKS

VOCs - Results from four method blanks, one equipment rinsate blank, and from two trip blanks were provided in support of both the soil and groundwater analyses. No VOCs were detected in any of the blanks analyzed.

SURROGATE RECOVERIES

VOCS - STL provided recovery results from four surrogate compounds spiked into each sample requiring VOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 92 to 129 percent, with the following exception. The dibromofluoromethane surrogate recovery for sample B-47-3 was high at 123 percent (upper control limit of 120 percent) Due to the high surrogate recovery, and possible high bias for the associated sample results, the following detections for sample B-47-3 are validated at J/Estimated:

Tetrachloroethene = 540 ug/Kg = J/Estimated Trichloroethene = 25 ug/Kg = J/Estimated

LABORATORY CONTROL SAMPLES

VOCs - Results from four sets of laboratory control sample (LCS) and LCS duplicate analyses were provided in support of the VOC analyses. LCS recoveries were acceptable,

ranging from 83 to 110 percent. Precision between the results of the LCS and LCS duplicate analyses was acceptable with a maximum RPD of 6.9 percent for trichloroethene.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

VOCs - Results from two sets of project specific (samples B-61-18 and SK-5D from other STL reports) and two sets of batch specific matrix spike (MS) and matrix spike duplicate (MSD) analyses were provided in support of the VOC analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable (with one exception), with recoveries ranging from 77 to 112 percent. The TCE recovery for one MS was low at 77 percent (lower control limit of 81 percent). No action is taken based on the single low TCE spike recovery, as associated LCS recoveries demonstrate acceptable accuracy.

FIELD DUPLICATE SAMPLE ANALYSES

Field duplicate samples were not collected with the samples submitted under this chain of custody.

RESULTS QUANTITATION

No anomalies were note with respect to results quantitation.

OVERALL DATA ASSESSMENT

The analytical data quality for samples and analyses listed on pages 1 and 2 of this validation report have been validated in accordance with the procedures described herein. Results were provided in STL report D1K120175 dated December 5, 2001.

All analytical results were found to be quantitative, with the exceptions detailed herein, and as summarized in the following table.

VALIDATION SUMMARY TABLE

Sample ID / Analyte	Data Qualifier	Reason for Qualification
B-47-3 / Trichloroethene and tetrachloroethene	J/Estimated	Associated surrogate recovery exceeds upper control limits. Sample results may be biased high.

Prepared By: William W. Nowhie

William W. Huskie

Geochemist

February 11, 2002

Date

VALIDATION OF LABORATORY RESULTS

SAFETY- KLEEN WICHITA RFI INVESTIGATION

SEVERN TRENT LABORATORY (STL) PROJECT NUMBER D1K070130

CAMERON-COLE PROJECT # 1205 - PHASE 2

Detailed in the following pages is the data validation for five surface water samples collected as part of an off-site surface water investigation conducted in the vicinity of the Safety-Kleen (S-K) Wichita Facility on November 6, 2001. The samples were collected and analyzed in accordance with the specifications and procedures described in the RCRA Facility Investigation (RFI) Phase I Work Plan (S-K, October 14, 1999) and subsequent Groundwater Monitoring Work Plan Addendums. The following groundwater samples were collected:

Surface Water Samples

SK-SW-1A

SK-SW-2A

SK-SW-3A

SK-SW-4A

SK-SW-5A

SK-SW-5Z

Quality Control Samples

TB-01 (Trip blank)

The samples were submitted to Severn Trent Laboratory (STL) located in Arvada, Colorado. Samples were shipped by overnight courier and were received at the laboratory in one cooler on November 7, 2001, at acceptable temperatures 5.1 degrees Celsius.

Results of the analyses are provided in STL Laboratory Report D1K070130.

The samples were submitted for analysis of Volatile Organic Compounds (VOCs) by EPA method 8260B.

Review of this data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the RFI Work Plans, guidance provided in the most recent version of the USEPA Contract Laboratory Program (CLP) Documents providing "National Functional Guidelines for Organic Data Review", and by the professional judgment of a geochemist experienced in the data validation and evaluation process.

COMPARISON OF REQUESTED AND PERFORMED ANALYSES

The samples submitted under the chain-of-custody (COC) were analyzed and reported as requested. Samples listed on the COC for rush analysis are not evaluated herein. Results for these analyses will be reported under separate cover.

HOLDING TIME COMPLIANCE

The samples were collected on November 6, 2001 and were analyzed on November 13, 2001. All analyses were completed within proper holding time of 14 days for preserved VOCs.

BLANKS

Results from one method blank and from one trip blank were provided in support of the VOC analyses. No VOCs were detected in the method blanks.

SURROGATE RECOVERIES

STL provided recovery results for four surrogate compounds spiked into each sample requiring VOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 93 to 105 percent.

LABORATORY CONTROL SAMPLES

Results from one set of laboratory control sample (LCS) and LCS duplicate (LCSD) analyses were provided in support of the VOC analyses (analyzed November 13, 2001). LCS recoveries ranged from 84 to 108 percent. Precision between the LCS and LCSD recoveries was acceptable, with a maximum relative percent difference (RPD) of 2.2 percent (RPD control limit of 20 percent).

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

Results from one set of project specific (sample SK-SW-1A) matrix spike (MS) and matrix spike duplicate (MSD) analyses were provided in support of the VOC analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable, with spike recoveries ranging from 87 to 112 percent. The maximum RPD between spike recoveries was 1.5 percent (RPD control limit of 20 percent).

LABORATORY AND FIELD DUPLICATE SAMPLE ANALYSES

Laboratory duplicate analyses were not performed or required. Field duplicate samples were not collected

RESULTS QUANTITATION

No sample dilutions were required. Reporting limits are acceptable. No anomalies were noted with results quantitation for the sample submitted.

OVERALL DATA ASSESSMENT

The analytical data quality for samples and analyses listed on page 1 this validation report have been validated in accordance with the procedures described herein. Analytical results were provided in STL Report Number D1K070130 dated November 28, 2001.

All analytical results were found to be quantitative, with no data qualification required.

VALIDATION PERFORMED BY:

William W. Huskie, Consulting Geochemist

SIGNATURE:

William W. Huskie

DATE: December 1, 2001

D:\sk\wichita\Novem_SW_VaL.doc

VALIDATION OF LABORATORY RESULTS

SAFETY- KLEEN WICHITA GROUNDWATER INVESTIGATION

SEVERN TRENT LABORATORY (STL) PROJECT NUMBER D1K070112

CAMERON-COLE PROJECT # 1205 - PHASE 2

Detailed in the following pages is the data validation for 10 groundwater samples collected as part of a GeoProbe® drive point investigation conducted at the Safety-Kleen (S-K) Wichita Facility on November 6, 2001. The samples were collected and analyzed in accordance with the specifications and procedures described in the RCRA Facility Investigation (RFI) Phase I Work Plan (S-K, October 14, 1999) and the subsequent Groundwater Monitoring Work Plan Addendums. The following groundwater samples were collected:

Groundwater Samples

B-71D	B-71S	B-72S	B-72D	B-73S	B-73D
B-74S	B-74D	B-75S	B-75D		

Quality Control Samples

A trip blank was submitted with the groundwater samples for analysis. However, the groundwater samples were requested for analysis on a 24 hour rush turnaround basis, and the trip blank was not. Therefore, results for the trip blank are not available.

The samples were submitted to Severn Trent Laboratory (STL) located in Arvada, Colorado. Samples were shipped by overnight courier and were received at the laboratory in one cooler on November 7, 2001, at acceptable temperatures 5.1 degrees Celsius.

Results of the analyses are provided in STL Laboratory Report D1K070112.

The samples were submitted for analysis of Volatile Organic Compounds (VOCs) by EPA method 8260B.

Review of this data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the RFI Work Plan, guidance provided in the most recent version of the USEPA Contract Laboratory Program (CLP) Documents providing "National Functional Guidelines for Organic Data Review", and by the professional judgment of a geochemist experienced in the data validation and evaluation process.

COMPARISON OF REQUESTED AND PERFORMED ANALYSES

The groundwater samples submitted under the chain-of-custody (COC) were analyzed and reported as requested. Samples listed on the COC for non-rush analysis are not evaluated herein. Results for these analyses will be reported under separate cover.

HOLDING TIME COMPLIANCE

The samples were collected on November 6, 2001 and were analyzed the following day on November 7, 2001. All analyses were completed within proper 14 day holding time for preserved VOCs.

BLANKS

Results from two method blanks were provided in support of the VOC analyses. No VOCs were detected in the method blanks.

SURROGATE RECOVERIES

STL provided recovery results for four surrogate compounds spiked into each sample requiring VOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 86 to 113 percent.

LABORATORY CONTROL SAMPLES

Results from two sets of laboratory control sample (LCS) and LCS duplicate (LCSD) analyses were provided in support of the VOC analyses (analyzed November 7 and 8, 2001). LCS recoveries ranged from 93 to 104 percent. Precision between the LCS and LCSD recoveries was acceptable, with a maximum relative percent difference (RPD) of 3.7 percent (RPD control limit of 20 percent).

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

Results from two sets of batch specific matrix spike (MS) and matrix spike duplicate (MSD) analyses were provided in support of the VOC analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable, with one exception. MS recoveries ranged from 76 to 101 percent. The 76 percent MS recovery for benzene in the November 8, 2001 spike is below the lower control limit of 79 percent. No action is taken based on the single low MS recovery, as VOCS are not qualified based on MS recoveries alone, and all other associated QC meet required control limits. The maximum RPD between spike recoveries was 4.8 percent (RPD control limit of 20 percent).

LABORATORY AND FIELD DUPLICATE SAMPLE ANALYSES

Laboratory duplicate analyses were not performed or required. Field duplicate samples were not collected

RESULTS QUANTITATION

STL reported VOC concentrations for sample S-74S from a five fold dilution. Results for sample B-75S were reported from a four fold dilution. Reporting limits are acceptable. No anomalies were noted with results quantitation for the sample submitted.

OVERALL DATA ASSESSMENT

The analytical data quality for samples and analyses listed on page 1 this validation report have been validated in accordance with the procedures described herein. Analytical results were provided in STL Report Number D1K070112 dated November 12, 2001.

All analytical results were found to be quantitative, with no data qualification required.

VALIDATION PERFORMED BY:

William W. Huskie, Consulting Geochemist

SIGNATURE:

William W. Huskie

DATE: November 15, 2001

D:\sk\wichita\Novem_DP_GW_VaL.doc

VALIDATION OF LABORATORY RESULTS

SAFETY- KLEEN WICHITA RFI INVESTIGATION

SEVERN TRENT LABORATORY (STL) PROJECT NUMBER D1K130262

CAMERON-COLE PROJECT # 1205 - PHASE 2

Detailed in the following pages is the data validation for seven groundwater samples (and associated quality control samples) collected in the vicinity of the Safety-Kleen (S-K) Wichita Facility on November 11, 2001. The samples were collected and analyzed in accordance with the specifications and procedures described in the RCRA Facility Investigation (RFI) Phase I Work Plan (S-K, October 14, 1999) and subsequent Groundwater Monitoring Work Plan Addendums. The following groundwater and QC samples were collected:

Groundwater Samples

SK-11S HRI-03

WND-32

MW-10

MW-11

MW-14

RSCI-1

Quality Control Samples

RB-111101 (Rinsate blank) FB-111101 (Field blank)

Sample SK-28S was prepared as a blind duplicate of MW-11. SK-28S was submitted under a separate chain-of-custody and results are reported in STL report D1K130267. Precision for this duplicate pair is addressed in this validation report.

The samples were submitted to Severn Trent Laboratory (STL) located in Arvada, Colorado. Samples were shipped by overnight courier on November 12, 2001 and were received at the laboratory in good condition on November 13, 2001, at acceptable temperatures ranging from 3.4 to 4.9 degrees Celsius.

Results of the analyses are provided in STL Laboratory Report D1K130262 dated December 5, 2001.

The samples were tested for the analytes listed in the following Table in accordance with United States Environmental Protection Agency (USEPA) SW-846 methodologies, Standard Methods for Analysis of Water and Wastes, and as described in Table 5 of the RFI Work Plan.

Analysis Requested	Analytical Method	Samples Analyzed
Volatile Organic Compounds (VOCs)	Method 8260B	All samples listed on page 1 of this report
Dissolved Gasses – Ethane, Ethene, and Methane	RSK SOP 175 STL Austin, Texas Laboratory	
Dissolved Metals – Calcium, Iron, Potassium, Magnesium, Manganese, and Sodium	Method 6010B	All samples except: rinsate blank and
Total Metals – Iron and Manganese	Method 6010B	
Total Dissolved Solids	Method 160.1	the field blank,
Alkalinity	Method 310.1	
Nitrate as Nitrogen	Method 353.2	
Ammonia as N	Method 350.1	
Sulfate	Method 375.4	
Chloride	Method 325.2	
Total Organic Carbon	Method 415.1	

Review of this data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the RFI Work Plan, guidance provided in the most recent version of the USEPA Contract Laboratory Program (CLP) Documents providing "National Functional Guidelines for Inorganic and Organic Data Review", and by the professional judgment of a geochemist experienced in the QA/QC evaluation process.

COMPARISON OF REQUESTED AND PERFORMED ANALYSES

The groundwater samples submitted under the chain-of-custodies (COCs) associated with this validation were analyzed and reported as requested.

HOLDING TIME COMPLIANCE

The samples were collected on November 11, 2001 and arrived at the laboratory within two days of collection. Samples submitted for dissolved metals analysis were preserved in the field with nitric acid after field-filtering.

Other analyses requiring preservation were properly preserved. All samples were received at the laboratory properly chilled. STL prepared a holding time report showing all dates of sample collection, analysis, and comparison to required holding times. All analyses were completed within proper holding times for the methods requested.

BLANKS

VOCs - Results from one field blank (FB-111101) and from one peristaltic pump rinsate blank (RB-111101) were provided in support of the VOC analyses. No VOCs were detected in either of the blanks. Results from two method blank were also provided, with no VOCs detected above reporting limits.

Other Parameters - STL provided method blank results associated with the dissolved gasses, total and dissolved metals, and for the complete set of requested general chemistry parameters. No target analytes were detected above reporting limits in any of the method blanks.

SURROGATE RECOVERIES

STL provided recovery results from four surrogate compounds spiked into each sample requiring VOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 83 to 120 percent.

LABORATORY CONTROL SAMPLES

VOCs - Results from two set of laboratory control sample (LCS) and LCS duplicate (LCSD) analyses were provided in support of the VOC analyses. LCS recoveries were acceptable, ranging from 84 to 106 percent. Precision between the LCS and LCSD recoveries was acceptable, with a maximum relative percent difference (RPD) of 5.7 percent (RPD control limit of 20 percent).

Dissolved Gasses - Two sets of LCS and LCSD analyses were provided in support of the dissolved gasses analyses. Precision and accuracy, as demonstrated by these analyses, is acceptable. LCS recoveries were acceptable, ranging from 94 to 103 percent, with a maximum RPD of 3.1 percent.

Metals - One LCS analysis was provided in support of the total metals analyses. One LCS was provided in support of the dissolved metals analyses. Metals LCS recoveries were acceptable, ranging from 97 to 104 percent.

General Chemistry - One set of LCS and LCSD analyses was provided in support of the general chemistry parameters (ammonia, nitrate/nitrite, alkalinity, TDS, and TOC). LCS recoveries were acceptable, ranging from 88 to 105 percent, with a maximum RPD of 3.1 percent (for TDS).

Results from one LCS analysis were provided for chloride and for sulfate. LCS recoveries were acceptable, at 97 and 94 percent, respectively.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

VOCs - Results from one set of batch specific matrix spike (MS) and matrix spike duplicate (MSD) analyses were provided in support of the VOC analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable, with MS recoveries ranging from 84 to 95 percent. The maximum RPD between spike recoveries was 4.5 percent (RPD control limit of 20 percent). Results from another batch specific MS analysis were provided with recoveries ranging from 81 to 104 percent (the associated MSD analysis was not analyzed due to instrument problems).

Dissolved Gasses - Results from one batch specific MS and MSD analysis were provided in support of the dissolved gasses analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable, with spike recoveries ranging from 92 to 102 percent. The maximum RPD between spike recoveries was 7.5 percent for dissolved methane (RPD control limit of 21 percent).

Metals - Results from one batch specific MS/MSD analysis were provided in support of the total metals, with recoveries ranging from 96 to 100 percent, and a maximum RPD of 0.89 percent. Results from one batch specific MS/MSD analysis were provided in support of the dissolved metals analyses with recoveries ranging from 99 to 108 percent. The maximum RPD between MS results was 2.0 percent for potassium. MS and MSD recoveries were not calculated for dissolved calcium, because the native sample result was more than four times the spike added amount.

General Chemistry - Results from both batch and project specific MS/MSD analyses were provided in support of the general chemistry parameters. Spike recoveries ranged from 96 to 101 percent, with a maximum RPD of 2.5 percent for ammonia. Precision and accuracy, as demonstrated by these analyses, is acceptable.

LABORATORY AND FIELD DUPLICATE SAMPLE ANALYSES

Laboratory duplicate sample results were provided in support of the TDS and alkalinity results. Precision of the duplicate analyses for these analytes was within STL prescribed control limits, with a maximum RPD of 1.4 percent.

Sample SK-28S was prepared as a blind field duplicate of MW-11. SK-28S was submitted under a separate COC and results are reported in STL report D1K130267. Precision for this duplicate pair is addressed herein. Methane, dissolved metals, total metals, and general chemistry analytes were detected in both samples of the primary/duplicate pair. The maximum RPD between any of these detections is 35 percent for dissolved methane. The following VOCs were detected in one or both samples of the duplicate pair:

SK-28S isopropylbenzene, n-propylbenzene, sec-butylbenzene, n-butylbenzene, cis-1,2-DCE, and naphthalene

For the VOCs detected in both samples, precision is acceptable. For the VOCs detected in one sample, but not the other, concentrations agree within two reporting limit increments, and precision is acceptable, with one exception. Results for naphthalene do not agree within reporting limit increments. Due to this poor precision, naphthalene results for both the primary and duplicate samples are determined to be J/Estimated.

TOTAL VERSUS DISSOLVED METALS RESULTS

A comparison of total and dissolved results was performed for each sample analyzed for iron and manganese. A dissolved metal concentration should not exceed that of the associated total metal concentration by more than 10 percent. Dissolved manganese results exceeds those for total manganese by more than 10 percent for the following samples:

```
SK-11S - dissolved Mn = 0.75 mg/L and total Mn = 0.65 mg/L WND-32 - dissolved Mn = 3.3 mg/L and total Mn = 1.4 mg/L
```

Therefore, both total and dissolved manganese values for samples SK-11S and WND-32 may have some bias, and are qualified as J/Estimated.

RESULTS QUANTITATION

STL reported concentrations for some samples from dilutions in order to bring target compound concentrations into proper calibration range. Sample HRI-03 was diluted by a factor of 4 times for VOCs in order to quantitate trichloroethene. Samples MW-10 and MW-14 were diluted by a factor of 40 times each, though no VOC detections were reported. Sulfate results are all reported from five fold dilutions due to elevated sulfate concentrations in the samples.

Methane concentrations for samples MW-10, MW-11, and MW-14 exceeded the linear calibration range in the initial sample analyses. Methane results for these analyses were flagged "E", and should not be used (these data are qualified as R/Rejected). Reanalysis for these samples was performed to bring methane into calibration range. Methane results should be taken from the reanalyses (results flagged "D"). Results for the other dissolved gasses should be taken from the non-diluted analysis.

OVERALL DATA ASSESSMENT

The analytical data quality for samples and analyses listed on pages 1 and 2 of this validation report have been validated in accordance with the procedures described herein. Results were provided in STL report D1K130262 dated December 5, 2001.

All analytical results were found to be quantitative, with the exceptions detailed herein, and as summarized in the following table.

VALIDATION SUMMARY TABLE .

Sample ID / Analyte	Data Qualifier	Reason for Qualification
SK-11S and WND-32 / Total and Dissolved Manganese	J/ Estimated	Dissolved manganese result exceeds total manganese result by more than 10 percent
MW-10, MW-11, and MW-14 (Laboratory "E" flagged results) / Methane	R/Rejected	Results reported exceed calibration range and are not accurate. Results from "D-flagged" dilution re-run analyses should be used.
MW-11 / Naphthalene	UJ/Estimated and non- detect	Poor precision between the results of field duplicate samples. Only primary and duplicate samples are
SK-28S* / Naphthalene	J/Estimated	qualified.

^{*} Results found in STL report D1K130267 dated December 5, 2001

Prepared By: William W. Muskie

William W. Huskie

Geochemist

December 10, 2001

Date

VALIDATION OF LABORATORY RESULTS

SAFETY- KLEEN WICHITA RFI INVESTIGATION

SEVERN TRENT LABORATORY (STL) PROJECT NUMBER D1K130267

CAMERON-COLE PROJECT # 1205 - PHASE 2

Detailed in the following pages is the data validation for 12 groundwater samples (and associated quality control samples) collected in the vicinity of the Safety-Kleen (S-K) Wichita Facility on November 11, 2001. The samples were collected and analyzed in accordance with the specifications and procedures described in the RCRA Facility Investigation (RFI) Phase I Work Plan (S-K, October 14, 1999) and subsequent Groundwater Monitoring Work Plan Addendums. The following groundwater and QC samples were collected:

Groundwater Samples

SK-1S	SK-1D	SK-2S	SK-2D	SK-3S	SK-3D
SK-4S	SK-4D	SK-5S	SK-5D	SK-6S	SK-10S

Quality Control Samples

TB-04 (Trip blank) TB-05 (Trip blank)

SK-25D (blind duplicate of SK-1D)

SK-26S (blind duplicate of SK-10S)

SK-27S (blind duplicate of SK-3S)

SK-28S (blind duplicate of MW-11) – Note that the results of this duplicate pair are evaluated in the validation letter for STL Report # D1K130262

The samples were submitted to Severn Trent Laboratory (STL) located in Arvada, Colorado. Samples were shipped by overnight courier on November 12, 2001 and were received at the laboratory in good condition on November 13, 2001, at acceptable temperatures ranging from 3.4 to 4.9 degrees Celsius.

Results of the analyses are provided in STL Laboratory Report D1K130267 dated December 5, 2001.

The samples were tested for the analytes listed in the following Table in accordance with United States Environmental Protection Agency (USEPA) SW-846 methodologies, Standard Methods for Analysis of Water and Wastes, and as described in Table 5 of the RFI Work Plan.

Analysis Requested	Analytical Method	Samples Analyzed
Volatile Organic Compounds (VOCs)	Method 8260B	All samples listed on page 1 of this
		report
Dissolved Gasses - Ethane, Ethene, and	RSK SOP 175	
Methane	STL Austin, Texas	
	Laboratory	
Dissolved Metals - Calcium, Iron,	Method 6010B	All samples except:
Potassium, Magnesium, Manganese,		
and Sodium		Trip blanks
Total Metals – Iron and Manganese	Method 6010B	
Total Dissolved Solids	Method 160.1	
Alkalinity	Method 310.1	
Nitrate as Nitrogen	Method 353.2	
Ammonia as N	Method 350.1	
Sulfate	Method 375.4	
Chloride	Method 325.2	·
Total Organic Carbon	Method 415.1	

Review of this data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the RFI Work Plan, guidance provided in the most recent version of the USEPA Contract Laboratory Program (CLP) Documents providing "National Functional Guidelines for Inorganic and Organic Data Review", and by the professional judgment of a geochemist experienced in the QA/QC evaluation process.

COMPARISON OF REQUESTED AND PERFORMED ANALYSES

The groundwater samples submitted under the chain-of-custodies (COCs) associated with this validation were analyzed and reported as requested.

HOLDING TIME COMPLIANCE

The samples were collected on November 11, 2001 and arrived at the laboratory within two days of collection. Samples submitted for dissolved metals analysis were preserved in the field with nitric acid after field-filtering.

Other analyses requiring preservation were properly preserved. All samples were received at the laboratory properly chilled. STL prepared a holding time report showing all dates of sample collection, analysis, and comparison to required holding times. All analyses were completed within proper holding times for the methods requested.

BLANKS

VOCs - Results from two trip blanks (TB-04 and TB-05) were provided in support of the VOC analyses. No VOCs were detected in either of the trip blanks. Results from two method blanks were also provided, with no VOCs detected above reporting limits.

Other Parameters - STL provided method blank results associated with the dissolved gasses, total and dissolved metals, and for the complete set of requested general chemistry parameters. No target analytes were detected above reporting limits in any of the method blanks analyzed for these parameters.

SURROGATE RECOVERIES

STL provided recovery results from four surrogate compounds spiked into each sample requiring VOC analysis. All surrogate recoveries were within prescribed control limits, ranging from 88 to 118 percent.

LABORATORY CONTROL SAMPLES

VOCs - Results from two sets of laboratory control sample (LCS) and LCS duplicate (LCSD) analyses were provided in support of the VOC analyses. LCS recoveries were acceptable, ranging from 87 to 104 percent. Precision between the LCS and LCSD recoveries was acceptable, with a maximum relative percent difference (RPD) of 4.8 percent for TCE (RPD control limit of 20 percent).

Dissolved Gasses - One set of LCS and LCSD analyses were provided in support of the dissolved gasses analyses. Precision and accuracy, as demonstrated by these analyses, is acceptable. LCS recoveries were acceptable, ranging from 92 to 98 percent, with a maximum RPD of 0.22 percent for ethene.

Metals - One LCS analysis was provided in support of the total metals analyses. One LCS was provided in support of the dissolved metals analyses. Metals LCS recoveries were acceptable, ranging from 95 to 100 percent.

General Chemistry - One set of LCS and LCSD analyses were provided in support of the general chemistry parameters (ammonia, nitrate/nitrite, alkalinity, TDS, and TOC). LCS recoveries were acceptable, ranging from 87 to 106 percent, with a maximum RPD of 9.5 percent (for total alkalinity).

Results from one LCS analysis were provided for chloride and for sulfate. LCS recoveries were acceptable, at 98 and 100 percent, respectively.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

VOCs - Results from one set of project specific (sample SK-1S) matrix spike (MS) and matrix spike duplicate (MSD) analyses were provided in support of the VOC analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable, with MS recoveries ranging from 95 to 103 percent. The maximum RPD between spike recoveries was 3.4 percent for benzene (RPD control limit of 20 percent). Results from another project specific (SK-5D) MS/MSD analysis were provided with recoveries ranging from 77 to 107 percent. The 77 percent MS recovery for TCE was below the 81 percent lower control limit. No action is taken as precision and accuracy are demonstrated by the other MS/MSD pair and by the associated LCS and LCSD analyses.

Dissolved Gasses - Results from one batch specific MS and MSD analysis were provided in support of the dissolved gasses analyses. Precision and accuracy, as determined by the MS and MSD analyses, were acceptable, with spike recoveries ranging from 85 to 94 percent. The maximum RPD between spike recoveries was 1.1 percent for dissolved ethane (RPD control limit of 14 percent).

Metals - Results from one sample specific (SK-1S) MS/MSD analysis were provided in support of the total and dissolved metals. Total manganese recoveries were acceptable at 103 and 106 percent. Total iron recoveries were not calculated due to the high total iron concentration in the native sample. Dissolved metals spike recoveries were acceptable, ranging from 91 to 102 percent. The maximum RPD between MS results was 1.8 percent for calcium.

General Chemistry - Results from both batch and project specific MS/MSD analyses were provided in support of the general chemistry parameters. Spike recoveries ranged from 94 to 110 percent, with a maximum RPD of 1.9 percent for TOC. Precision and accuracy, as demonstrated by these analyses, is acceptable.

LABORATORY AND FIELD DUPLICATE SAMPLE ANALYSES

Laboratory duplicate sample results were provided in support of the TDS and alkalinity results. Precision of the duplicate analyses for these analytes was within STL prescribed control limits, with a maximum RPD of 13 percent for TDS.

Sample SK-28S was prepared as a blind field duplicate of MW-11. MW-11 was submitted under a separate COC and results are reported in STL report D1K130262. The validation for this duplicate pair is provided in the letter for STL report D1K130262.

Three other field duplicate pairs were collected with the samples submitted under this COC, and are evaluated herein. SK-25D is a blind duplicate of SK-1D; SK-26S is a blind duplicate of SK-10S; and SK-27S is a blind duplicate of SK-3S.

Precision is evaluated as follows:

VOCs – No VOCs were detected in either sample of the SK-25D and SK-1D pair, and precision is determined to be acceptable

1,1-DCA, Cis-1,2-DCE, PCE, TCE, and vinyl chloride were each detected in both samples of the SK-26S and SK-10S pair. Precision between each of these VOC detections was acceptable, with RPDs each less than 40 percent.

Cis-1,2-DCE, ethylbenzene, isopropylbenzene, n-propylbenzene, PCE, toluene, TCE, 1,2,4-TMB, 1,3,5-TMB, o-xylene, and m&p-xylenes were detected in both samples of the SK-3S and SK-27S pair. Isopropylbenzene and naphthalene were additionally detected in the SK-3S sample. Precision between all of the VOC detections was acceptable, with RPDs less than 40 percent, or with results in agreement by two reporting limit increments, or less.

Dissolved Gasses – Precision for dissolved gasses in the three duplicate pairs was acceptable, with RPDs all less than 40 percent. Methane and ethane detections were evaluated.

Metals – Low concentrations of total iron and manganese were detected in the SK-25D and SK-1D pair. Precision is acceptable.

Elevated concentrations of total iron and total manganese were detected in both samples of the SK-26S and SK-10S pair. The RPD for total iron is high at 50 percent. Due to this poor precision, total iron results for both samples in this duplicate pair are qualified as J/Estimated.

Elevated concentrations of total iron and total manganese were detected in both samples of the SK-3S and SK-27S pair. The RPD for total iron is high at 61 percent. Due to this poor precision, total iron results for both samples in this duplicate pair are qualified as J/Estimated.

General Chemistry – Precision between general chemistry parameter detections for the three duplicate pairs is acceptable for all analyzes with the following exception. The RPD for TOC between the SK-3S and SK-27S duplicate pair is high at 71 percent. Due to this poor precision, TOC results for both samples in this duplicate pair are qualified as J/Estimated.

TOTAL VERSUS DISSOLVED METALS RESULTS

A comparison of total and dissolved results was performed for each sample analyzed for iron and manganese. A dissolved metal concentration should not exceed that of the associated total metal concentration by more than 10 percent. Dissolved metals concentrations do not exceed these for total metals in any samples, and no action is required.

RESULTS QUANTITATION

STL reported concentrations for some samples from dilutions in order to bring target compound concentrations into proper calibration range. Samples SK-3D, SK-4S, and SK-4D were diluted by factors of 2 times, SK-5S, SK-5D, SK-10S, and SK-26S were diluted by 4 times, and sample SK-27S was diluted by 5 times to quantitate VOCs.

Methane concentrations for samples SK-2S, SK-5S, and SK-28S (MW-11 duplicate) exceeded the linear calibration range in the initial sample analyses. Methane results for these analyses were flagged "E", and are not accurate (the results are qualified as R/Rejected). Reanalysis for these samples was performed to bring methane into calibration range. Methane results should be taken from the reanalyses (results flagged "D"). Results for the other dissolved gassed (ethane and ethene) should be taken from the non-diluted analyses.

OVERALL DATA ASSESSMENT

The analytical data quality for samples and analyses listed on pages 1 and 2 of this validation report have been validated in accordance with the procedures described herein. Results were provided in STL report D1K130267 dated December 5, 2001.

All analytical results were found to be quantitative, with the exceptions detailed herein, and as summarized in the following table.

VALIDATION SUMMARY TABLE

Sample ID / Analyte	Data Qualifier	Reason for Qualification	
SK-26S and SK-10S SK-3S and SK-27S / Total iron	J/Estimated	Poor precision between results of field duplicate samples	
SK-3S and SK-27S / Total Organic Carbon	J/Estimated	Poor precision between results of field duplicate samples	
SK-28S / Naphthalene	J/Estimated	Poor precision between results of field duplicate samples	
SK-2S, SK-5S, and SK-28S (MW-11 duplicate) (Laboratory "E" flagged results) / Methane	R/Rejected	Results reported exceed calibration range and are not accurate. Results from dilution re-run analyses ("D-flagged") should be used.	

Prepared By: William W. Nowhie

William W. Huskie

Geochemist

December 10, 2001

Date

D:\sk\wichita\STL_267_GW.doc



STL Denver

4955 Yarrow Street Arvada, CO 80002-4517

Tel: 303 736 0100 Fax: 303 431 7171 www.stl-inc.com

ANALYTICAL REPORT

SAFETY KLEEN (WICHITA, KS)

Lot #: D1K150277

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue, Suite 100 Boulder, CO 80301

SEVERN TRENT LABORATORIES, INC.

Kae E. Yoder Project Manager

December 5, 2001

This report shall not be reproduced except in full, without the written approval of the laboratory

Severn Trent Laboratories, Inc.

Philadelphia, PA 19175-4305

Invoice

Tel:

Fax:

Bill To

STL Denver

4955 Yarrow Street Arvada, CO 80002

P.O. Box 7777 W4305

(303) 421-6611

(303) 431-7171

John Arbuthnot

Safety Kleen Inc

13351 Scenic Highway

Baton Rouge, LA 70807

Number 28032985

STL Project Number

Date

SERVICES

05 DEC 01

Customer Number

D1K150277

00408171

Terms

NET 30 DAYS

Customer Contact

SAMPLE RECEIVING DATE: 11/14/01

REPORT DATE: 12/03/01

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue

Suite 100

Boulder, CO 80301

Line No.	Qi	y. Code	Analysis Description	Unit Price	Extended Price
	3	WATER	WATER, Total Fe/Mn, 6010B	16.00	48.00
	3	WATER	WATER, Dissolved Ca/Fe/K/Mg/Mn/Na, 6010B	48.00	144.00
	3	WATER	WATER, Total Dissolved Solids, 160.1	8.00	24.00
	3	WATER	WATER, Carbonate Alkalinity, 310.1	8.00	24.00
	3	WATER	WATER, Chloride, 325.2	8.00	24.00
	3	WATER	WATER, Nitrate-Nitrite, 353.2	8.00	24.00
	3	WATER	WATER, Total Organic Carbon, 415.1	23.00	69.00
	3	WATER	WATER, Sulfate, 375.4	10.00	30.00
	3	WATER	WATER, Bicarbonate Alkalinity, 310.1	8.00	24.00
	3	WATER	WATER, Total Alkalinity, 310.1	8.00	24000
	3	WATER	WATER, Ammonia Nitrogen, 350.1	8.00	2
	3	WATER	WATER, Total Metals Digestion	3.00	9.00
	3	WATER	WATER, Dissolved Metals Digestion	3.00	9.00
	3	WATER	WATER, Dissolved Gases, RSK175	143.00	429.00
	7	WATER	WATER, Volatile Organics, 8260B	97.00	679.00
	2	WATER	*QC* WATER, MS/MSD Total Fe/Mn, 6010B	16.00	32.00
	2	WATER	*QC* WATER, MS/MSD Diss. Ca/Fe/K/Mg/Mn/Na, 6010B	48.00	96.00
	2	WATER	*QC* WATER, MS/MSD Chloride, 325.2	8.00	16.00
	2	WATER	*QC* WATER, MS/MSD Nitrate-Nitrite, 353.2	8.00	16.00
	2	WATER	*QC* WATER, MS/MSD Total Organic Carbon, 310.1	23.00	46.00
	2	WATER	*QC* WATER, MS/MSD Sulfate, 375.4	10.00	20.00
	2	WATER	*QC* WATER, MS/MSD Ammonia Nitrogen, 350.1	8.00	16.00
	2	WATER	*QC* WATER, MS/MSD Volatile Organics, 8260B	97.00	194.00
	2	WATER	*QC* WATER, MS/MSD Dissolved Gases, RSK175	143.00	286.00

NOTE: Applicable samples will be stored at no extra charge for a period of 30 days following the final report. Samples will be properly disposed of after 30 days, unless notified otherwise in writing.

Please reference Invoice number when remitting.

Customer P.O. Number / Contract Number / Reference

STL Project Manager

Kae Yoder

Sub Total Tax Total

Salesperson

DUPLICATE COPY

Severn Trent Laboratories, Inc.

Table Of Contents

Standard Deliverables

Report Contents

Total Number of Pages

Standard Deliverables

The Cover Letter and the Report Cover page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.



- Table of Contents
- Case Narrative
- Executive Summary Detection Highlights
- Methods Summary
- Method/Analyst Summary
- Lot Sample Summary
- Analytical Results
- QC Data Association Summary
- Hold Time Report
- Chain-of-Custody

CASE NARRATIVE

Client Name:

Safety-Kleen (Wichita)

Project Name:

Project Number:

Sample Delivery Group:

D1K150277

Narrative Date:

12/05/01

Sample Receipt

Four water samples, one field blank, one rinse blank and one trip blank, submitted by Safety-Kleen (Wichita), Inc., were received by STL Denver on November 14, 2001, according to documented sample acceptance procedures. The samples were received intact at temperatures of 5.3°C and 5.8°C. Analyses requested on the associated chains-of-custody are as follows: GC/MS Volatiles, Dissolved Gases, Dissolved Metals, Total Metals, and General Chemistry.

- As instructed by the client, the samples presented in this report were analyzed for Sulfate, Ammonia Nitrogen and Nitrate-Nitrite, in addition to the analyses requested on the chains-of-custody. The chains-of-custody have been revised to reflect this change. No other anomalies were encountered during sample receipt.
- > The Dissolved Gases analyses presented in this report were performed at the STL Austin facility.

GC/MS Volatiles

> Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
B-69-18	1,1-Dichloroethane	8.0	1.0	ug/L
	cis-1,2-Dichloroethene	3.8	1.0	ug/L
	Tetrachloroethene	1.5	1.0	ug/L
	1,1,1-Trichloroethane	3.2	1.0	ug/L
	Trichloroethene	2.0	1.0	ug/L
	Vinyl chloride	39	1.0	ug/L
TB-07	Methylene chloride	1.2 i	1.0	ug/L
SK-B68	: 1,1-Dichloroethane	2.7	2.5	ug/L
	cis-1,2-Dichloroethene	89	2.5	ug/L
· · · · · · · · · · · · · · · · · · ·	· Tetrachloroethene	5.9	2.5	ug/L
	1,1,1-Trichloroethane	20	2.5	ug/L
	Trichloroethene	8.3	2.5	ug/L
SK-29S	l,l-Dichloroethane	18	10	ug/L
	cis-1,2-Dichloroethene	370	10	ug/L
	Tetrachloroethene	26	10	ug/L
	1,1,1-Trichloroethane	120	10	ug/L
	Trichloroethene	40	10	ug/L
WND-32D	cis-1,2-Dichlorethene	. 17 :	2.0	ug/L
	Trichloroethene	110 i	2.0	ug/L

- > The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. In some cases, due to analytes present above the linear calibration curve, samples had to be analyzed at a dilution. For samples analyzed at a dilution, the reporting limits have been adjusted relative to the dilution required. The following table details the associated dilutions.

Sample ID	į	Dilution
SK-B68		1:2.5
SK-29S		1:10
WND-32D		1:2

Client specific MS/MSD was performed on sample WND-32D, as requested. All spike parameters were within QC control limits with the exception of the items noted in the following table. The acceptable LCS analysis data indicated that the analytical system was operating in control; therefore, corrective action is deemed unnecessary.

	MS	MSD	Recovery		RPD
Parameter	%Rec	%Rec	Limits	RPD	Limits
Trichloroethene	18	0.45	81-121	3.2	0-20

Dissolved Gases

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs. with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
SK-B68	Methane	460 E	0.50	ug/L
SK-B68 RE	Methane	1 700 D ı	5.0	ug/L
SK-29S	Methane	480 E	0.50 :	ug/L
SK-29S RE	: Methane	740 D	5.0	ug/L
WND-32D	Methane	2.6	0.50	ug/L

- > The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Samples SK-B68 and SK-29S exhibited concentrations that were above the linear calibration curve for Methane. The results in the analytical report have been flagged with an "E", as these are estimated values. The samples were reanalyzed with the necessary dilutions. The reporting limits have been adjusted relative to the dilution required, and the results have been flagged with a "D", as these results were obtained from the analysis of a dilution. Both the original and reanalysis data have been provided for comparison.

Total and Dissolved Metals

- Sample analysis revealed detectable concentrations at or above Safety-Kleen (Wichita)'s RLs, as detailed in the Executive Summary-Detection Highlights Report. The samples were analyzed within holding time and without incident, with the exception of the following item noted.
- Client specific MS/MSD was performed on sample WND-32D, as requested. All spike parameters were within QC control limits with the exception of the items noted in the following table. The acceptable LCS data indicated that the analytical system was operating in control; therefore, corrective action is deemed unnecessary.

Parameter	MS %Rec	MSD %Rec	Recovery Limits	RPD	RPD Limits
Dissolved Calcium	97	109	88-108	3.0	0-20

> Percent recoveries and RPD data could not be calculated, for the Total Iron MS/MSD performed on sample WND-32D, due to the sample concentrations reading greater than four times the spike amount.

General Chemistry

- > Sample analysis revealed detectable concentrations at or above Safety-Kleen (Wichita)'s RLs. as detailed in the Executive Summary-Detection Highlights Report. The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- The sample was analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high target constituent concentration, the Sulfate analysis for sample WND-32D was performed at a 1:10 dilution. The result in the analytical report has been flagged with a "Q" and the reporting limit has been adjusted relative to the dilution required.
- The Total Dissolved Solids analyses for samples SK-B68, SK-29S, WND-32D and the sample duplicate analysis performed on sample WND-32D, exhibited elevated reporting limits due to matrix interference. Results in the analytical report have been flagged with a "G".
- Client specific MS/MSD was performed on sample WND-32D, as requested. All spike parameters were within QC control limits with the exception of the items noted in the following table. The acceptable LCS/LCSD analysis data indicated that the analytical system was operating in control; therefore, corrective action is deemed unnecessary.

Parameter	MS %Rec	MSD %Rec	Recovery Limits	RPD	RPD Limits
Ammonia Nitrogen	85	84	90-110	1.9	0-10
Nitrate-Nitrite	88	87	90-110	0.69	0-10

These data and reporting limits are being used specifically to meet the needs of this project. All RLs are supported by STL Denver's Method Detection Limits (MDLs). Reporting limits in this report are at or above the MDL.

I certify that the data presented in this report are accurate, complete, and meets the minimum quality assurance standards in 40-CFR 136, 40-CFR 141, and/or SW846. The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. An assessment of the quality of the data, noting any exceptions, outliers, and/or problems encountered have been narrated herein.

Kae E. Yoger

Project Manager

Date

EXECUTIVE SUMMARY - Detection Highlights

D1K150277

		REPORTIN	1G	ANALYTICAL
PARAMETER	RESULT	LIMIT	UNITS	METHOD_
B-69-18 11/12/01 11:25 001				
1,1-Dichloroethane	8.0	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	3.8	1.0	ug/L	SW846 8260B
Tetrachloroethene	1.5	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	3.2	1.0	ug/L	SW846 8260B
Trichloroethene	2.0	1.0	ug/L	SW846 8260B
Vinyl chloride	39	1.0	ug/L	SW846 8260B
TB-07 11/12/01 002				
Methylene chloride	1.2	1.0	ug/L	SW846 8260B
SK-B68 11/12/01 10:00 004				
Methane	460 E	0.50	ug/L	RSK SOP-175
Methane	700 D	5.0	ug/L	RSK SOP-175
Calcium - DISSOLVED	127	0.20	mg/L	SW846 6010B
Iron - DISSOLVED	0.84	0.10	mg/L	SW846 6010B
Potassium - DISSOLVED	3.1	3.0	mg/L	SW846 6010B
Magnesium - DISSOLVED	36.4	0.20	mg/L	SW846 6010B
Manganese - DISSOLVED	1.1	0.010	mg/L	SW846 6010B
Sodium - DISSOLVED	54.4	5.0	mg/L	SW846 6010B
Iron	14.2	0.10	mg/L	SW846 6010B
Manganese	1.2	0.010	mg/L	SW846 6010B
1,1-Dichloroethane	2.7	2.5	ug/L	SW846 8260B
cis-1,2-Dichloroethene	89	2.5	ug/L	SW846 8260B
Tetrachloroethene	5.9	2.5	ug/L	SW846 8260B
1,1,1-Trichloroethane	20	2.5	ug/L	SW846 8260B
Trichloroethene	8.3	2.5	ug/L	SW846 8260B
Total Dissolved Solids	658 G	20.0	mg/L	MCAWW 160.1
Chloride	65.6	2.5	mg/L	MCAWW 325.2
Nitrate-Nitrite	0.36	0.10	mg/L	MCAWW 353.2
Total Organic Carbon	2.6	1.0	mg/L	MCAWW 415.1
Sulfate	42.8	5.0	mg/L	MCAWW 375.4
Bicarbonate	482	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	482	5.0	mg/L	MCAWW 310.1
Ammonia as N	0.27	0.10	mg/L	MCAWW 350.1

EXECUTIVE SUMMARY - Detection Highlights

D1K150277

рараметер		REPORTI		ANALYTICAL
PARAMETER	RESULT	LIMIT	<u>UNITS</u>	METHOD
SK-29S 11/12/01 13:30 005			•	
Methane	480 E	0.50	ug/L	RSK SOP-175
Methane	740 D	5.0	ug/L	RSK SOP-175
Calcium - DISSOLVED	127	0.20	mg/L	SW846 6010B
Iron - DISSOLVED	0.80	0.10	mg/L	SW846 6010B
Potassium - DISSOLVED	3.1	3.0	mg/L	SW846 6010B
Magnesium - DISSOLVED	36.6	0.20	mg/L	SW846 6010B
Manganese - DISSOLVED	1.1	0.010	mg/L	SW846 6010B
Sodium - DISSOLVED	55.5	5.0	mg/L	SW846 6010B
Iron	10.8	0.10	mg/L	SW846 6010B
Manganese	1.2	0.010	mg/L	SW846 6010B
1,1-Dichloroethane	18	10	ug/L	SW846 8260B
cis-1,2-Dichloroethene	370	10	ug/L	SW846 8260B
Tetrachloroethene	26	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	120	10	ug/L	SW846 8260B
Trichloroethene	40	10	ug/L	SW846 8260B
Total Dissolved Solids	674 G	20.0	mg/L	MCAWW 160.1
Chloride	65.5	2 5	,_	
Nitrate-Nitrite	0.31	2.5 0.10	mg/L	MCAWW 325.2
Total Organic Carbon	2.7		mg/L	MCAWW 353.2
Sulfate	48.3	1.0 5.0	mg/L	MCAWW 415.1
Bicarbonate	485	5.0	mg/L	MCAWW 375.4
Alkalinity	402	5.0	mg/L	MCAWW 310.1
Total Alkalinity	485	5.0	mg/L	MCAWW 310.1
Ammonia as N	0.25	0.10	mg/L	MCAWW 310.1 MCAWW 350.1
WND-32D 11/12/01 17:00 006				
Methane	2.6	0.50	ug/L	RSK SOP-175
Calcium - DISSOLVED	136	0.20	mg/L	SW846 6010B
Magnesium ~ DISSOLVED	55.8	0.20	mg/L	SW846 6010B
Manganese - DISSOLVED	0.080	0.010	mg/L	SW846 6010B
Sodium - DISSOLVED	52.6	5.0	mg/L	SW846 6010B
Iron	55.3	0.10	mg/L	SW846 6010B
Manganese	1.3	0.010	mg/L	SW846 6010B
cis-1,2-Dichloroethene	17	2.0	ug/L	SW846 8260B
Trichloroethene	110	2.0	11 cr /T	SW846 8260B
Total Dissolved	1070 G	20.0	mg/L ,	MCAWW 160.1
Solids		-	5, 2	TOTALL TOU.T
Chloride	80.1	2.5	mg/L	MCAWW 325.2
Nitrate-Nitrite	3.1	0.10	mg/L	MCAWW 353.2
Total Organic Carbon	2.4	1.0	mg/L	MCAWW 415.1
Sulfate	231 Q	50.0	mg/L	MCAWW 375.4

EXECUTIVE SUMMARY - Detection Highlights

D1K150277

PARAMETER WND-32D 11/12/01 17:00 006	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Bicarbonate Alkalinity	324	5.0	mg/L	MCAWW 310.1
Total Alkalinity	324	5.0	mg/L	MCAWW 310.1

METHODS SUMMARY

D1K150277

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Alkalinity	MCAWW 310.1	MCAWW 310.1
Bicarbonate Alkalinity	MCAWW 310.1	MCAWW 310.1
Carbonate Alkalinity	MCAWW 310.1	MCAWW 310.1
Chloride (Colorimetric, Automated Ferricyanide)	MCAWW 325.2	MCAWW 325.2
Dissolved Gases in Water	RSK SOP-175	EPA-9 RSK-175
Filterable Residue (TDS)	MCAWW 160.1	MCAWW 160.1
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3005A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Nitrate-Nitrite	MCAWW 353.2	MCAWW 353.2
Nitrogen, Ammonia	MCAWW 350.1	MCAWW 350.1
Sulfate	MCAWW 375.4	MCAWW 375.4
Total Organic Carbon	MCAWW 415.1	MCAWW 415.1
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

MCAWW	"Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.
RSK	Sample Prep and Calculations for Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibration Technique, RSKSOP-175, REV. 0, 8/11/94, USEPA Research Lab
SW846	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

D1K150277

ANALYTI METHOD	CAL	ANALYST	ANALYST ID
MCAWW 1	60.1	Lisa Finkle	003889
MCAWW 3	10.1	Ewa Kudla	001167
MCAWW 3	25.2	Maria Fayard	002596
MCAWW 3	50.1	Sara Agner	002536
MCAWW 3	53.2	Roxanne K. Sullivan	001200
MCAWW 3	75.4	Maria Fayard	
MCAWW 4	15.1	Dave Elkin	002596
RSK SOP	-175	William Jaycox	000901
SW846 6	010B	Lynn-Anne Trudell	800012
SW846 6	010B	Steve Mustain	006645
SW846 82	260B	Mike G. Hoffman	006720 001880
Reference	ces:		001000
MCAWW	"Methods for Chemic EPA-600/4-79-020, N	cal Analysis of Water and Wast March 1983 and subsequent revi	es", sions.
RSK	in Water Samples Us	culations for Dissolved Gas A sing a GC Headspace Equilibrat 75, REV. 0, 8/11/94, USEPA Re	ion
SW846	"Test Methods for E Methods", Third Edi	Evaluating Solid Waste, Physication, November 1986 and its u	al/Chemical odates.

SAMPLE SUMMARY

D1K150277

<u>wo #</u>	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
EN28N	001	B-69-18	11/12/01	11:25
EN28R	002	TB-07	11/12/01	
EN28X	003	FB-111201	11/12/01	17:00
EN282	004	SK-B68 .	11/12/01	10:00
EN29H	005	SK-29S	11/12/01	13:30
EN29M	006	WND-32D	11/12/01	17:00
EN29P	007	RB-111201	11/12/01	16:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Client Sample ID: B-69-18

GC/MS Volatiles

Lot-Sample #...: D1K150277-001 Work Order #...: EN28N1AA Matrix..... WATER

 Date Sampled...:
 11/12/01 11:25
 Date Received...:
 11/14/01

 Prep Date.....:
 11/21/01
 Analysis Date...:
 11/21/01

 Prep Batch #...:
 1328124
 Analysis Time...:
 08:05

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	8.0	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	3.8	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
		· ·	3 / —

Client Sample ID: B-69-18

GC/MS Volatiles

Lot-Sample #: D1K150277-001	Work Order #: EN28N1AA	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	1.5	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	· ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			-
1,1,1-Trichloroethane	3.2	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	2.0	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	39	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			-
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	98	(80 - 120))
1,2-Dichloroethane-d4	91	(72 - 127	')
4-Bromofluorobenzene	102	(79 - 119))
Toluene-d8	105	(79 ~ 119))

Client Sample ID: TB-07

GC/MS Volatiles

Lot-Sample #...: D1K150277-002 Work Order #...: EN28R1AA Matrix..... WATER

 Date Sampled...: 11/12/01
 Date Received...: 11/14/01

 Prep Date....: 11/21/01
 Analysis Date...: 11/21/01

 Prep Batch #...: 1328124
 Analysis Time...: 08:26

Dilution Factor: 1

Method....: SW846 8260B

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	1.2	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: TB-07

GC/MS Volatiles

Lot-Sample #: D1K1502	277-002 Work Order	#: EN28R1AA	Matrix:	WATER
-----------------------	--------------------	-------------	---------	-------

		REPORTIN	1G
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	uq/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			J.
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			J.
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	99	(80 - 120	0)
1,2-Dichloroethane-d4	92	(72 - 127	
4-Bromofluorobenzene	97	(79 - 119	
Toluene-d8	103	(79 - 119)

Client Sample ID: FB-111201

GC/MS Volatiles

Lot-Sample #...: D1K150277-003 Work Order #...: EN28X1AA Matrix..... WATER

Date Sampled...: 11/12/01 17:00 Date Received..: 11/14/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1328124 Analysis Time..: 08:48

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTIN	1G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	, ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND .	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: FB-111201

GC/MS Volatiles

Lot-Sample #: D1K150277-0	Work Order #: EN28X1AA	Matrix WATER
---------------------------	------------------------	--------------

		REPORTING	l
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	uq/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			· J / —
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	uq/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			J.
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	101	(80 - 120)	-
1,2-Dichloroethane-d4	93	(72 - 127)	
4-Bromofluorobenzene	99	(79 - 119)	
Toluene-d8	103	(79 - 119)	

Client Sample ID: SK-B68

GC/MS Volatiles

Lot-Sample #...: D1K150277-004 Work Order #...: EN2821AA Matrix..... WATER

 Date Sampled...:
 11/12/01 10:00 Date Received...:
 11/14/01

 Prep Date.....:
 11/21/01 Analysis Date...:
 11/21/01

 Prep Batch #...:
 1328124 Analysis Time...:
 06:25

Dilution Factor: 2.5

Method..... SW846 8260B

		REPORTIN	īG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	2.5	ug/L
Bromobenzene	ND	2.5	ug/L
Bromochloromethane	ND	2.5	ug/L
Bromodichloromethane	ND	2.5 ,	ug/L
Bromoform	ND	2.5	ug/L
Bromomethane	ND	5.0	ug/L
n-Butylbenzene	ND	2.5	ug/L
sec-Butylbenzene	ND	2.5	ug/L
tert-Butylbenzene	ND	2.5	ug/L
Carbon tetrachloride	ND	2.5	ug/L
Chlorobenzene	ND	2.5	ug/L
Chlorodibromomethane	ND	2.5	ug/L
Chloroethane	ND	5.0	ug/L
Chloroform	ND	2.5	ug/L
Chloromethane	ND	5.0	ug/L
2-Chlorotoluene	ND	2.5	ug/L
4-Chlorotoluene	ND	2.5	ug/L
Dibromomethane	ND	2.5	ug/L
1,2-Dichlorobenzene	ND	2.5	ug/L
1,3-Dichlorobenzene	ND	2.5	ug/L
1,4-Dichlorobenzene	ND	2.5	ug/L
Dichlorodifluoromethane	ND	5.0	ug/L
1,1-Dichloroethane	2.7	2.5	ug/L
1,2-Dichloroethane	ND	2.5	ug/L
1,1-Dichloroethene	ND	2.5	ug/L
cis-1,2-Dichloroethene	89	2.5	ug/L
trans-1,2-Dichloroethene	ND	1.2	ug/L
1,2-Dichloropropane	ND	2.5	ug/L
1,3-Dichloropropane	ND	2.5	ug/L
2,2-Dichloropropane	ND	12	ug/L
1,1-Dichloropropene	ND	2.5	ug/L
Ethylbenzene	ND	2.5	ug/L
Trichlorofluoromethane	ND	5.0	ug/L
Hexachlorobutadiene	ND	2.5	ug/L
Isopropylbenzene	ND	2.5	ug/L
p-Isopropyltoluene	ND	2.5	ug/L
Methylene chloride	ND	2.5	ug/L
Naphthalene	ND	2.5	ug/L
-			-3/-

Client Sample ID: SK-B68

GC/MS Volatiles

Lot-Sample #: D1K150277-004	Work Order #: EN2821AA	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	2.5	ug/L
Styrene	ND	2.5	ug/L
1,1,1,2-Tetrachloroethane	ND	2.5	ug/L
1,1,2,2-Tetrachloroethane	ND	2.5	ug/L
Tetrachloroethene	5.9	2.5	ug/L
Toluene ·	ND	2.5	ug/L
1,2,3-Trichlorobenzene	ND	2.5	ug/L
1,2,4-Trichloro-	ND	2.5	ug/L
benzene			45/1
1,1,1-Trichloroethane	20	2.5	uq/L
1,1,2-Trichloroethane	ND	2.5	ug/L
Trichloroethene	8.3	2.5	ug/L
1,2,3-Trichloropropane	ND	2.5	ug/L
1,2,4-Trimethylbenzene	ND	2.5	ug/L
1,3,5-Trimethylbenzene	ND	2.5	ug/L
Vinyl chloride	ND	2.5	ug/L
o-Xylene	ND	2.5	ug/L
m-Xylene & p-Xylene	ND	5.0	ug/L
1,2-Dibromo-3-	ND	5.0	ug/L
chloropropane (DBCP)			3, -
1,2-Dibromoethane (EDB)	ND	2.5	uq/L
-		-	-3, -
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	97	(80 - 120)	
1,2-Dichloroethane-d4	91	(72 - 127)	
4-Bromofluorobenzene	98	(79 - 119)	
Toluene-d8	104	(79 - 119)	

Client Sample ID: SK-29S

GC/MS Volatiles

Lot-Sample #...: D1K150277-005 Work Order #...: EN29H1AC Matrix..... WATER

Date Sampled...: 11/12/01 13:30 Date Received..: 11/14/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1328124 Analysis Time..: 06:04

Dilution Factor: 10

Method..... SW846 8260B

		REPORTI	1G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	10	ug/L
Bromobenzene	ND	10	ug/L
Bromochloromethane	ND	10	ug/L
Bromodichloromethane	ND	10	ug/L
Bromoform	ND	10	ug/L
Bromomethane	ND	20	ug/L
n-Butylbenzene	ND	10	ug/L
sec-Butylbenzene	ND	10	ug/L
tert-Butylbenzene	ND	10	ug/L
Carbon tetrachloride	ND	10	ug/L
Chlorobenzene	ND	10	ug/L
Chlorodibromomethane	ND	10	ug/L
Chloroethane	ND	20	ug/L
Chloroform	ND	10	ug/L
Chloromethane	ND	20	ug/L
2-Chlorotoluene	ND	10	ug/L
4-Chlorotoluene	ND	10	ug/L
Dibromomethane	ND	10	ug/L
1,2-Dichlorobenzene	ND	10	ug/L
1,3-Dichlorobenzene	ND	10	ug/L
1,4-Dichlorobenzene	ND	10	ug/L
Dichlorodifluoromethane	ND	20	ug/L
1,1-Dichloroethane	18	10	ug/L
1,2-Dichloroethane	ND	10	ug/L
1,1-Dichloroethene	ND	10	ug/L
cis-1,2-Dichloroethene	370	10	ug/L
trans-1,2-Dichloroethene	ND	5.0	ug/L
1,2-Dichloropropane	ND	10	ug/L
1,3-Dichloropropane	ND	10	ug/L
2,2-Dichloropropane	ND	50	ug/L
1,1-Dichloropropene	ND	10	ug/L
Ethylbenzene	ND	10	ug/L
Trichlorofluoromethane	ND	20	ug/L
Hexachlorobutadiene	ND	10	ug/L
Isopropylbenzene	ND	10	ug/L
p-Isopropyltoluene	ND	10	ug/L
Methylene chloride	ND	10	ug/L
Naphthalene	ND	10	ug/L
			_

Client Sample ID: SK-29S

GC/MS Volatiles

Lot-Sample #: DlK150277-005 Work Orde	#: EN29H1AC	Matrix: WATER
---------------------------------------	-------------	---------------

222142		REPORTIN	r G
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	10	ug/L
Styrene	ND .	10	ug/L
1,1,1,2-Tetrachloroethane	ND	10	ug/L
1,1,2,2-Tetrachloroethane	ND	10	ug/L
Tetrachloroethene	26	10	ug/L
Toluene	ND	10	ug/L
1,2,3-Trichlorobenzene	ND	10	ug/L
1,2,4-Trichloro- benzene	ND	10	ug/L
1,1,1-Trichloroethane	120	10	ug/L
1,1,2-Trichloroethane	ND	10	ug/L
Trichloroethene	40	10	ug/L
1,2,3-Trichloropropane	ND	10	ug/L
1,2,4-Trimethylbenzene	ND	10	ug/L
1,3,5-Trimethylbenzene	ND	10	ug/L
Vinyl chloride	ND	10	ug/L
o-Xylene	ND	10	ug/L
m-Xylene & p-Xylene	ND	20	ug/L
1,2-Dibromo-3- chloropropane (DBCP)	ND	20	ug/L
1,2-Dibromoethane (EDB)	ND	10	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	104	(80 - 120))
1,2-Dichloroethane-d4	101	(72 - 127	
4-Bromofluorobenzene	100	(79 - 119	
Toluene-d8	100	(50	

Client Sample ID: WND-32D

GC/MS Volatiles

Lot-Sample #...: D1K150277-006 Work Order #...: EN29M1AC Matrix..... WATER

 Date Sampled...:
 11/12/01 17:00
 Date Received...:
 11/14/01

 Prep Date....:
 11/21/01
 Analysis Date...:
 11/21/01

 Prep Batch #...:
 1328124
 Analysis Time...:
 07:01

Dilution Factor: 2

Method.....: SW846 8260B

		REPORTIN	īG
PARAMETER	RESULT	LIMIT	UNITS
1,4-Dichlorobenzene	ND	2.0	ug/L
Dichlorodifluoromethane	ND	4.0	ug/L
1,1-Dichloroethane	ND	2.0	ug/L
1,2-Dichloroethane	ND	2.0	ug/L
1,1-Dichloroethene	ND	2.0	ug/L
cis-1,2-Dichloroethene	17	2.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	2.0	ug/L
1,3-Dichloropropane	ND	2.0	ug/L
2,2-Dichloropropane	ND	10	ug/L
1,1-Dichloropropene	ND	2.0	ug/L
Ethylbenzene	ND	2.0	ug/L
Trichlorofluoromethane	ND	4.0	ug/L
Hexachlorobutadiene	ND	2.0	ug/L
Isopropylbenzene	ND	2.0	ug/L
p-Isopropyltoluene	ND	2.0	ug/L
Methylene chloride	ND	2.0	ug/L
Naphthalene	ND	2.0	ug/L
n-Propylbenzene	ND	2.0	ug/L
Styrene	ND	2.0	ug/L
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L
Tetrachloroethene	ND	2.0	ug/L
Toluene	ND	2.0	ug/L
1,2,3-Trichlorobenzene	ND	2.0	ug/L
1,2,4-Trichloro-	ND	2.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	2.0	ug/L
1,1,2-Trichloroethane	ND	2.0	ug/L
Trichloroethene	110	2.0	ug/L
1,2,3-Trichloropropane	ND	2.0	ug/L
1,2,4-Trimethylbenzene	ND	2.0	ug/L
1,3,5-Trimethylbenzene	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
o-Xylene	ND	2.0	ug/L
m-Xylene & p-Xylene	ND	4.0	ug/L
1,2-Dibromo-3-	ND	4.0	ug/L
chloropropane (DBCP)			

Client Sample ID: WND-32D

GC/MS Volatiles

LOC-Sample #: D1K150277-006 V	Work Order #: EN29M1AC	Matrix: WATER
-------------------------------	------------------------	---------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
1,2-Dibromoethane (EDB)	ND	2.0	ug/L
Benzene	ND	2.0	ug/L
Bromobenzene	ND	2.0	ug/L
Bromochloromethane	ND	2.0	ug/L
Bromodichloromethane	ND	2.0	ug/L
Bromoform	ND	2.0	ug/L
Bromomethane	ND	4.0	ug/L ug/L
n-Butylbenzene	ND	2.0	ug/L
sec-Butylbenzene	ND	2.0	ug/L ug/L
tert-Butylbenzene	ND	2.0	ug/L
Carbon tetrachloride	ND	2.0	ug/L ug/L
Chlorobenzene	ND	2.0	-
Chlorodibromomethane	ND	2.0	ug/L
Chloroethane	ND	4.0	ug/L
Chloroform	ND	2.0	ug/L
Chloromethane	ND	4.0	ug/L
-Chlorotoluene	ND	2.0	ug/L
-Chlorotoluene	ND	2.0	ug/L
ibromomethane	ND	2.0	ug/L
,2-Dichlorobenzene	ND	2.0	ug/L
,3-Dichlorobenzene	ND	2.0	ug/L
		2.0	ug/L
	PERCENT	RECOVERY	
URROGATE	RECOVERY	LIMITS	
ibromofluoromethane	93	(80 - 120	1)
,2-Dichloroethane-d4	86	(72 - 127	
-Bromofluorobenzene	91	(79 - 119	
oluene-d8	111	(79 - 119	

Client Sample ID: RB-111201

GC/MS Volatiles

Lot-Sample #...: D1K150277-007 Work Order #...: EN29P1AA Matrix..... WATER

Date Sampled...: 11/12/01 16:30 Date Received..: 11/14/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1328124 Analysis Time..: 09:10

Dilution Factor: 1

Method..... SW846 8260B

PARAMETER RESULT LIMIT UNITS
Bromobenzene ND 1.0 ug/L
Bromochloromethane ND 1.0 ug/L Bromodichloromethane ND 1.0 ug/L Bromoform ND 1.0 ug/L Bromomethane ND 1.0 ug/L n-Butylbenzene ND 1.0 ug/L sec-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 2.0
Bromodichloromethane ND 1.0 ug/L Bromoform ND 1.0 ug/L Bromomethane ND 2.0 ug/L n-Butylbenzene ND 1.0 ug/L sec-Butylbenzene ND 1.0 ug/L tert-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chloroethane ND 1.0 ug/L Chloroform ND 1.0 ug/L Chlorotoluene ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 2.0
Bromoform ND 1.0 ug/L Bromomethane ND 2.0 ug/L n-Butylbenzene ND 1.0 ug/L sec-Butylbenzene ND 1.0 ug/L tert-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
Bromomethane ND 2.0 ug/L n-Butylbenzene ND 1.0 ug/L sec-Butylbenzene ND 1.0 ug/L tert-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorotomethane ND 1.0 ug/L Chlorotoluene ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
n-Butylbenzene ND 1.0 ug/L sec-Butylbenzene ND 1.0 ug/L tert-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 2.0 ug/L Chlorotoform ND 1.0 ug/L Chloroform ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
sec-Butylbenzene ND 1.0 ug/L tert-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chloroethane ND 1.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
tert-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chloroethane ND 1.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chloroethane ND 1.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chloroethane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
Chlorodibromomethane ND 1.0 ug/L Chloroethane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
Chloroethane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 2.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
Chloroform ND 1.0 ug/L Chloromethane ND 2.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
Chloromethane ND 2.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L
1,1-Dichloroethene ND 1.0 ug/L
cis-1,2-Dichloroethene ND 1.0 ug/L
trans-1,2-Dichloroethene ND 0.50 ug/L
1,2-Dichloropropane ND 1.0 ug/L
1,3-Dichloropropane ND 1.0 ug/L
2,2-Dichloropropane ND 5.0 ug/L
1,1-Dichloropropene ND 1.0 ug/L
Ethylbenzene ND 1.0 ug/L
Trichlorofluoromethane ND 2.0 ug/L
Hexachlorobutadiene ND 1.0 ug/L
Isopropylbenzene ND 1.0 ug/L
p-Isopropyltoluene ND 1.0 ug/L
Methylene chloride ND 1.0 ug/L
Naphthalene ND 1.0 ug/L
n-Propylbenzene ND 1.0 ug/L

Client Sample ID: RB-111201

GC/MS Volatiles

Lot-Sample #...: D1K150277-007 Work Order #...: EN29P1AA Matrix..... WATER

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Styrene	ND	1.0	uq/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	uq/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			- J, —
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			57 -
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
			37
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	102	(80 - 120)	
1,2-Dichloroethane-d4	95	(72 - 127)	
4-Bromofluorobenzene	99	(79 - 119)	
Toluene-d8	101	(79 - 119)	
		•	

Client Sample ID: SK-B68

GC Volatiles

Lot-Sample #:	D1K150277-004	Work Order #: EN2821AC	Matrix WAT	TER
---------------	---------------	------------------------	------------	-----

Date Sampled...: 11/12/01 10:00 Date Received..: 11/14/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332454 Analysis Time..: 04:51

Dilution Factor: 1

Method..... RSK SOP-175

REPORTING

PARAMETER	RESULT	LIMIT	UNITS
Ethane	ND	0.50	ug/L
Ethene	ND	0.50	ug/L
Methane	460 B	0.50	ug/L

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

Client Sample ID: SK-B68

GC Volatiles

Lot-Sample #: D1K150277-00. Date Sampled: 11/12/01 10: Prep Date: 11/21/01 Prep Batch #: 1332454 Dilution Factor: 10	Work Order #: Do Date Received Analysis Date Analysis Time	11/14/01 11/21/01	Matrix: WATER
	Method:	RSK SOP-17	5
PARAMETER Ethane Ethene Methane	RESULT ND ND 700 D	REPORTING LIMIT 5.0 5.0 5.0	UNITS ug/L ug/L ug/L
NOTE(S):			

D Result was obtained from the analysis of a dilution.

Client Sample ID: SK-29S

GC Volatiles

Lot-	Sample	#:	D1K150277-005	Work Order	#:	EN29H1AD	Matrix	WATER

Date Sampled...: 11/12/01 13:30 Date Received..: 11/14/01
Prep Date....: 11/21/01 Analysis Date..: 11/21/01
Prep Batch #...: 1332454 Analysis Time..: 05:03

Dilution Factor: 1

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Ethane	ND	0.50	ug/L
Ethene	ND	0.50	ug/L
Methane	480 E	0.50	ug/L

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

Client Sample ID: SK-29S

GC Volatiles

Lot-Sample #: D1K150277- Date Sampled: 11/12/01 1 Prep Date: 11/21/01 Prep Batch #: 1332454 Dilution Factor: 10	005 Work Order # 3:30 Date Received Analysis Date Analysis Time	: 11/14/01 : 11/21/01	Matrix: WATER
	Method	: RSK SOP-1	75
PARAMETER Ethane	RESULT	REPORTING LIMIT	UNITS
Ethene	ND	5.0	ug/L
	ND	5.0	ug/L
Methane	740 D	5.0	ug/L
NOTE(S):			

D Result was obtained from the analysis of a dilution.

Client Sample ID: WND-32D

GC Volatiles

Lot-Sample #:	D1K150277-006	Work Order #: EN29M1AD	Matrix WATER
The state of the s			WAICK

Date Sampled...: 11/12/01 17:00 Date Received..: 11/14/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332454 Analysis Time..: 05:16

Dilution Factor: 1

Method.....: RSK SOP-175

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
Ethane	ND	0.50	ug/L	
Ethona		0.50	ug/II	

Ethene ND 0.50 ug/L
Methane 2.6 0.50 ug/L

Client Sample ID: SK-B68

TOTAL Metals

Lot-Sample # Date Sampled			eceived:	: 11/14/01	Matrix:	WATER
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch # Iron	14.2	0.10 Dilution Facto	mg/L or: 1	SW846 6010B Analysis Time: 09:53	11/20-11/27/01	EN2821AD

SW846 6010B

Analysis Time..: 23:09

mg/L

Manganese

1.2

0.010

Dilution Factor: 1

11/20-11/27/01 EN2821AE

Client Sample ID: SK-B68

DISSOLVED Metals

Lot-Sample #...: D1K150277-004 Matrix....: WATER Date Sampled...: 11/12/01 10:00 Date Received..: 11/14/01

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	: 1324312					
Calcium	127	0.20	mg/L	SW846 6010B	11/20-11/27/01	EN2821AC
		Dilution Facto	or: 1	Analysis Time: 17:03		MEULING
Iron	0.84	0.10	mg/L	SW846 6010B	11/20-11/27/01	EN2821AH
		Dilution Facto	r: 1	Analysis Time: 17:01		
Potassium	3.1	3.0	mg/L	SW846 6010B	11/20-11/27/01	EN2821AL
		Dilution Facto	r: 1	Analysis Time: 17:01		
Magnesium	36.4	0.20	mg/L	SW846 6010B	11/20-11/27/01	EN2821A.T
		Dilution Facto	r: 1	Analysis Time: 17:01		
Manganese	1.1	0.010	mg/L	SW846 6010B	11/20-11/27/01	EN2821AK
		Dilution Factor	r: 1	Analysis Time: 17:01		
Sodium	54.4	5.0	mg/L	SW846 6010B	11/20-11/27/01	EN2821AF
		Dilution Factor	r: 1	Analysis Time: 17:01	==,== ==,==	miz oz im

Client Sample ID: SK-29S

TOTAL Metals

Lot-Sample # Date Sampled	Matrix:	WATER				
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch # Iron	: 1324582 10.8	0.10 Dilution Facto	mg/L pr: 1	SW846 6010B Analysis Time: 09:57	11/20-11/27/01	EN29Hlae
Manganese	1.2	0.010 Dilution Facto	mg/L or: 1	SW846 6010B Analysis Time: 23:14	11/20-11/27/01	EN29Hlaf

Client Sample ID: SK-29S

DISSOLVED Metals

Lot-Sample #...: D1K150277-005

Date Sampled...: 11/12/01 13:30 Date Received..: 11/14/01

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	.: 1324312					
Calcium	127	0.20	mg/L	SW846 6010B	11/20-11/27/01	EN29H1AH
		Dilution Facto	r: 1	Analysis Time: 17:05		
Iron	0.80	0.10	mg/L	SW846 6010B	11/20-11/27/01	EN29HLAJ
·		Dilution Facto	r: 1	Analysis Time: 17:05		
Potassium	3.1		mg/L	SW846 6010B	11/20-11/27/01	EN29H1AM
		Dilution Factor	r: 1	Analysis Time: 17:05		
Magnesium	36.6		mg/L	SW846 6010B	11/20-11/27/01	EN29Hlak
		Dilution Factor	f: 1	Analysis Time: 17:05		
Manganese	1.1	0.010	mg/L	SW846 6010B	11/20-11/27/01	KN29H1AI.
		Dilution Factor	:: 1	Analysis Time: 17:05	. ,	
Sodium	55.5		mg/L	SW846 6010B	11/20-11/27/01	EN29H1AG
		Dilution Factor	: 1	Analysis Time: 17:05		

Client Sample ID: WND-32D

TOTAL Metals

Lot-Sample # Date Sampled	Matrix:	WATER				
PARAMETER	RESULT	REPORTING LIMIT	G <u>UNITS</u>	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	.: 1324582				٠	
Iron	55.3	0.10	mg/L	SW846 6010B	11/20-11/27/01	EN29Mlar
		Dilution Fact	or: 1	Analysis Time: 10:01		
Manganese	1.3	0.010	mg/L	SW846 6010B	11/20-11/27/01	RN29M1AF
		Dilution Fact	or: 1	Analysis Time: 23:20	,,,	

Client Sample ID: WND-32D

DISSOLVED Metals

Lot-Sample # Date Sampled	Matrix:	WATER				
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	.: 1324312					
Calcium	136	0.20 Dilution Fact	mg/L or: 1	SW846 6010B Analysis Time: 17:08	11/20-11/27/01	EN29M1AH
Tron	ND	0.10 Dilution Facto	-	SW846 6010B Analysis Time: 17:08	11/20-11/27/01	EN29M1AJ
Potassium	ND	3.0 Dilution Facto	-	SW846 6010B Analysis Time: 17:08	11/20-11/27/01	EN29M1AM
Magnesium	55.8	0.20 Dilution Facto	mg/L or: 1	SW846 6010B Analysis Time: 17:08	11/20-11/27/01	EN29Mlak
Manganese	0.080	0.010 Dilution Facto	mg/L or: 1	SW846 6010B Analysis Time: 17:08	11/20-11/27/01	EN29MLAL
Sodium	52.6	5.0 Dilution Facto	mg/L or: 1	SW846 6010B Analysis Time: 17:08	11/20-11/27/01	EN29Mlag

Client Sample ID: SK-B68

General Chemistry

Lot-Sample #...: D1K150277-004 Work Order #...: EN282
Date Sampled...: 11/12/01 10:00 Date Received..: 11/14/01

Matrix..... WATER

PARAMETER Ammonia as N	RESUL'		UNITS	METHO		PREPARATION- ANALYSIS DATE	PREP BATCH #
Tallifoldia as it	0.27	0.10 Dilution Fac	mg/L		350.1	11/17/01	1322111
		bilucion rac	cor: 1	Analysis	Time: 08:00		
Bicarbonate Alkalinity	482	5.0	mg/L	MCAWW	310.1	11/21/01	1330371
		Dilution Fac	tor: 1	Analysis	Time: 09:00		
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW	310.1	11/21/01	1330372
		Dilution Fact	or: 1	Analysis	Time: 09:00		
Chloride	65.6	2.5	mg/L	MCAWW		11/16/01	1324259
		Dilution Fact	or: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	0.36	0.10	mg/L	MCAWW		11/20/01	1325277
		Dilution Fact	or: 1	Analysis	Time: 15:00		
Sulfate	42.8	5.0	mg/L	MCAWW		11/27/01	1331468
		Dilution Fact	or: 1	Analysis	Time: 13:00		
Total Alkalinity	482	5.0	mg/L	MCAWW	-	11/21/01	1330370
•		Dilution Fact	or: 1	Analysis	Time: 09:00		
Total Dissolved Solids	658 G	20.0	mg/L	MCAWW	160.1	11/16/01	1320536
		Dilution Fact	or: 2	Analysis '	Time: 17:00		
Total Organic Carbon	2.6	1.0	mg/L	MCAWW 4	415.1	11/27-11/28/01	1332417
		Dilution Facto	or: 1		rime: 06:00	,,, 20/01	T736411
NOTE(S):							

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: SK-29S

General Chemistry

Lot-Sample #...: D1K150277-005 Work Order #...: EN29H Matrix....: WATER Date Sampled...: 11/12/01 13:30 Date Received..: 11/14/01

PARAMETER	RESULT	RL	UNITS	METHO)D	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	0.25	0.10 Dilution Fac	mg/L tor: 1		7 350.1 s Time: 08:00	11/17/01	1322111
Bicarbonate Alkalinity	485	5.0	mg/L	MCAWW	310.1	11/21/01	1330371
		Dilution Factor: 1		Analysis	Time: 09:00		
Carbonate Alkalinity	ND	5.0 Dilution Fact	mg/L		310.1 Time: 09:00	11/21/01	1330372
Chloride	65.5	2.5 Dilution Fact	mg/L	MCAWW	325.2 Time: 13:00	11/16/01	1324259
Nitrate-Nitrite	0.31	0.10 Dilution Fact	mg/L	MCAWW	353.2 Time: 15:00	11/20/01	1325277
Sulfate	48.3	5.0 Dilution Fact	mg/L or: 1	MCAWW	375.4 Time: 13:00	11/27/01	1331468
Total Alkalinity	485	5.0 Dilution Fact	mg/L or: 1	MCAWW		11/21/01	1330370
Total Dissolved Solids	674 G	20.0	mg/L	MCAWW		11/16/01	1320536
		Dilution Fact	or: 2	Analysis	Time: 17:00		
Total Organic Carbon	2.7	1.0 Dilution Facto	mg/L or: 1	MCAWW Analysis	415.1 Time: 07:00	11/27-11/28/01	1332417
Note(s):							

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CAMERON-COLE LLC

Client Sample ID: WND-32D

General Chemistry

Lot-Sample #...: D1K150277-006 Work Order #...: EN29M Matrix....: WATER

Date Sampled...: 11/12/01 17:00 Date Received..: 11/14/01

PARAMETER	RESULT	L RL	UNITS	METHO	D	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND	0.10 Dilution Fact	mg/L or: 1		350.1 Time: 08:00	11/17/01	1322111
Bicarbonate Alkalinity	324	5.0	mg/L	MCAWW	310.1	11/21/01	1330371
		Dilution Fact	or: 1	Analysis	Time: 09:00	•	
Carbonate Alkalinity	ND	5.0 Dilution Fact	mg/L or: 1	MCAWW Analysis	310.1 Time: 09:00	11/21/01	1330372
Chloride	80.1	2.5 Dilution Factor	mg/L or: 1	MCAWW Analysis	325.2 Time: 13:00	11/16/01	1324259
Nitrate-Nitrite	3.1	0.10 Dilution Factor	mg/L or: 1	MCAWW Analysis	353.2 Time: 15:00	11/20/01	1325277
Sulfate	231 Q	50.0 Dilution Facto	mg/L or: 10	MCAWW Analysis	375.4 Time: 13:00	11/27/01	1331468
Total Alkalinity	324	5.0 Dilution Factor	mg/L or: 1	MCAWW Analysis	310.1 Time: 09:00	11/21/01	1330370
Total Dissolved Solids	1070 G	20.0	mg/L	MCAWW	160.1	11/16/01	1320536
		Dilution Facto	r: 2	Analysis	Time: 17:00		
Total Organic Carbon	2.4	1.0 Dilution Facto	mg/L r: 1	MCAWW Analysis	415.1 Time: 07:00	11/27-11/28/01	1332417
270000 (a)							

NOTE(S):

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

QC DATA ASSOCIATION SUMMARY

D1K150277

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 8260B		1328124	1328030
002	WATER	SW846 8260B		1328124	1328030
003	WATER	SW846 8260B		1328124	1328030
004	WATER	MCAWW 160.1		1320536	1324314
	WATER	MCAWW 310.1		1330372	7254774
	WATER	MCAWW 325.2		1324259	1324102
	WATER	MCAWW 353.2		1325277	1325117
	WATER	MCAWW 415.1		1332417	
	WATER	RSK SOP-175		1332417	1332223
	WATER	SW846 8260B		1328124	1332246
	WATER	SW846 6010B		1324312	1328030
	WATER	SW846 6010B		1324582	1324125
	WATER	MCAWW 375.4		1331468	1324303
	WATER	MCAWW 310.1		1331468	1331240
•	WATER	MCAWW 310.1		1330371	1220142
	WATER	MCAWW 350.1		1322111	1330142 1322023
005	WATER	MCAWW 160.1		1320536	1324314
	WATER	MCAWW 310.1		1330372	
	WATER	MCAWW 325.2		1324259	1324102
	WATER	MCAWW 353.2		1325277	1325117
	WATER	MCAWW 415.1		1332417	1332223
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B		1328124	1328030
	WATER	SW846 6010B		1324312	1324125
	WATER	SW846 6010B		1324582	1324303
	WATER	MCAWW 375.4		1331468	1331240
	WATER	MCAWW 310.1		1330371	
	WATER	MCAWW 310.1		1330370	1330142
	WATER	MCAWW 350.1		1322111	1322023
006	WATER	MCAWW 160.1		1320536	1324314
	WATER	MCAWW 310.1		1330372	
	WATER	MCAWW 325.2		1324259	1324102
	WATER	MCAWW 353.2		1325277	1325117
	WATER .	MCAWW 415.1		1332417	1332223
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B		1328124	1328030
	WATER	SW846 6010B		1324312	1324125
	WATER	SW846 6010B		1324582	1324303
	WATER	MCAWW 375.4	•	1331468	1331240

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

D1K150277

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
006	WATER	MCAWW 310.1		1330371	
	WATER	MCAWW 310.1		1330370	1330142
	WATER	MCAWW 350.1		1322111	1322023
007	WATER	SW846 8260B		1328124	1328030

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K150277 Work Order #...: EPF4D1AC Matrix..... WATER

LCS Lot-Sample#: D1K240000-124

 Prep Date....: 11/21/01
 Analysis Date..: 11/21/01

 Prep Batch #...: 1328124
 Analysis Time..: 05:20

Dilution Factor: 1

PARAMETER 1,1-Dichloroethene Benzene Chlorobenzene Toluene Trichloroethene	PERCENT RECOVERY 98 104 87 102 107	RECOVERY LIMITS (79 - 119) (79 - 119) (76 - 116) (75 - 122) (81 - 121)	METHOD SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B
SURROGATE Dibromofluoromethane 1,2-Dichloroethane-d4 4-Bromofluorobenzene Toluene-d8		PERCENT RECOVERY 98 93 95	RECOVERY LIMITS (80 - 120) (72 - 127) (79 - 119) (79 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K150277 Work Order #...: EPF4D1AC Matrix....: WATER

LCS Lot-Sample#: D1K240000-124

Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1328124 Analysis Time..: 05:20

Dilution Factor: 1

PARAMETER 1,1-Dichloroethene Benzene Chlorobenzene Toluene Trichloroethene	SPIKE AMOUNT 10.0 10.0 10.0 10.0 10.0	MEASURED <u>AMOUNT</u> 9.82 10.4 8.74 10.2 10.7	UNITS ug/L ug/L ug/L ug/L	PERCENT RECOVERY 98 104 87 102 107	METHOD SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B
SURROGATE Dibromofluoromethane 1,2-Dichloroethane-d4 4-Bromofluorobenzene Toluene-d8		PERCENT RECOVERY 98 93 95	RECOVERY LIMITS (80 - 120) (72 - 127) (79 - 119) (79 - 119)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D1K150277

Work Order #...: EPF4D1AA

Matrix..... WATER

MB Lot-Sample #: D1K240000-124

Prep Date....: 11/21/01 Prep Batch #...: 1328124

Analysis Time..: 05:41

Analysis Date..: 11/21/01

Dilution Factor: 1

		REPORT	ING			
PARAMETER	RESULT	LIMIT	UNITS	METHOD		
Bromomethane	ND	2.0	ug/L	SW846 8260B		
Benzene	ND	1.0	ug/L	SW846 8260B		
Bromobenzene	ND	1.0	ug/L	SW846 8260B		
Bromochloromethane	ND	1.0	ug/L	SW846 8260B		
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B		
Bromoform	ND	1.0	ug/L	SW846 8260B		
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B		
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B		
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B		
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B		
Chlorobenzene	ND	1.0	ug/L	SW846 8260B		
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B		
Chloroethane	ND	2.0	ug/L	SW846 8260B		
Chloroform	ND	1.0	ug/L	SW846 8260B		
Chloromethane	ND	2.0	ug/L	SW846 8260B		
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B		
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B		
Dibromomethane	ND	1.0	ug/L	SW846 8260B		
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B		
1,3-Dichlorobenzene	ND	1.0	ug/L			
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B SW846 8260B		
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B		
l,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B		
1,2-Dichloroethane	ND	1.0	ug/L	· -		
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B		
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B		
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B		
1,2-Dichloropropane	ND	1.0	ug/L ug/L	SW846 8260B		
l,3-Dichloropropane	ND	1.0		SW846 8260B		
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B		
l,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B		
Ethylbenzene	ND	1.0	ug/L	SW846 8260B		
richlorofluoromethane	ND	2.0	ug/L	SW846 8260B		
Mexachlorobutadiene	ND	1.0	ug/L	SW846 8260B		
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B		
o-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B		
Methylene chloride	ND	1.0	ug/L	SW846 8260B		
Japhthalene	ND		ug/L	SW846 8260B		
-Propylbenzene	ND	1.0	ug/L	SW846 8260B		
tyrene	ND	1.0	ug/L	SW846 8260B		
,,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B		
, -, -, - recruentoroechane	שים	1.0	ug/L	SW846 8260B		

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro- benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
1,2-Dibromo-3- chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		•
Dibromofluoromethane	100	(80 - 12	0)	
1,2-Dichloroethane-d4	91	(72 - 12	7)	
1-Bromofluorobenzene	98	(79 - 11		
Foluene-d8	105	(79 - 11		

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K150277 Work Order #...: EN29M1A1-MS Matrix..... WATER

MS Lot-Sample #: D1K150277-006 EN29M1A2-MSD

Date Sampled...: 11/12/01 17:00 Date Received..: 11/14/01
Prep Date....: 11/21/01 Analysis Date..: 11/21/01
Prep Batch #...: 1328124 Analysis Time..: 07:22

Dilution Factor: 2

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	97	(79 - 119)			SW846 8260B
	96	(79 - 119)	1.4	(0-20)	SW846 8260B
Benzene	104	(79 - 119)			SW846 8260B
	100	(79 - 119)	3.8	(0-20)	SW846 8260B
Chlorobenzene	88	(76 - 116)			SW846 8260B
	87	(76 - 116)	1.1	(0-20)	SW846 8260B
Toluene	101	(75 - 122)		•	SW846 8260B
	102	(75 - 122)	0.83	(0-20)	SW846 8260B
Trichloroethene	18 a	(81 - 121)			SW846 8260B
	0.45 a	(81 - 121)	3.2	(0-20)	SW846 8260B
		PERCENT		RECOVERY	
SURROGATE		RECOVERY		LIMITS	
Dibromofluoromethane		100		(80 - 120	<u>,</u>
		96		(80 - 120	•
1,2-Dichloroethane-d4		92		(72 - 127	•
		87		(72 127	•

SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	100	(80 - 120)		
	96	(80 - 120)		
1,2-Dichloroethane-d4	92	(72 - 127)		
	87	(72 - 127)		
4-Bromofluorobenzene	96	(79 - 119)		
	97	(79 - 119)		
Toluene-d8	103	(79 - 119)		
	107	(79 - 119)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K150277 Work Order #...: EN29M1A1-MS Matrix..... WATER

MS Lot-Sample #: D1K150277-006 EN29M1A2-MSD

Date Sampled...: 11/12/01 17:00 Date Received..: 11/14/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1328124 Analysis Time..: 07:22

Dilution Factor: 2

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	TRUOMA	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO	ח
1,1-Dichloroethene	ND .	20.0	19.7	ug/L	97			8260B
	ND	20.0	19.4	ug/L	96	1.4		8260B
Benzene	ND	20.0	20.8	ug/L	104		SW846	8260B
	ND	20.0	20.0	ug/L	100	3.8	SW846	8260B
Chlorobenzene	ND	20.0	17.5	ug/L	88		SW846	8260B
	ND	20.0	17.3	ug/L	87	1.1	SW846	8260B
Toluene	ND	20.0	20.3	ug/L	101		SW846	8260B
	ND	20.0	20.4	ug/L	102	0.83	SW846	8260B
Trichloroethene	110	20.0	112	ug/L	18 a		SW846	8260B
	110	20.0	109	ug/L	0.45 a	3.2	SW846	8260B
			PERCENT		RECOVERY			
SURROGATE	<u> </u>		RECOVER	Υ .	LIMITS			
Dibromofluoromethane	•		100	-	(80 - 120))		
			96		(80 - 120	•		
1,2-Dichloroethane-d4			92		(72 - 127	•		

(72 - 127)

(79 - 119)

(79 - 119)

(79 - 119)

(79 - 119)

87

96

97

103

107

NOTE(S):

Toluene-d8

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

4-Bromofluorobenzene

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: D1K150277

Work Order #...: EPL4Q1AC-LCS

LCS Lot-Sample#: I1K280000-454

Matrix....: WATER

Prep Date....: 11/21/01

EPL4Q1AD-LCSD

Analysis Date..: 11/21/01 Analysis Time..: 02:57

Prep Batch #...: 1332454 Dilution Factor: 1

PERCENT RECOVERY RPD PARAMETER RECOVERY LIMITS <u>RP</u>D METHOD <u>LIMITS</u> Ethane 98 (70 - 130)RSK SOP-175 98 (70 - 130)0.15 (0-30)RSK SOP-175 Ethene 92 (70 - 130)RSK SOP-175 93 (70 - 130)0.22 (0-30)RSK SOP-175 Methane 92 (70 - 130)RSK SOP-175 92 (70 - 130)0.14 (0-30) RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: D1K150277 Work Order #...: EPL4Q1AC-LCS Matrix..... WATER

LCS Lot-Sample#: I1K280000-454 EPL4Q1AD-LCSD

 Prep Date.....:
 11/21/01
 Analysis Date..:
 11/21/01

 Prep Batch #...:
 1332454
 Analysis Time..:
 02:57

Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Ethane	65.1	63.5	ug/L	98		RSK SOP-175
	64.9	63.4	ug/L	98	0.15	RSK SOP-175
Ethene	60.8	56.0	ug/L	92		RSK SOP-175
	60.7	56.2	ug/L	93	0.22	RSK SOP-175
Methane	34.8	32.0	ug/L	92		RSK SOP-175
	34.7	32.0	ug/L	92	0.14	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: D1K150277

Work Order #...: EPL4Q1AA

Matrix....: WATER

MB Lot-Sample #: I1K280000-454

Prep Date....: 11/21/01 Prep Batch #...: 1332454 Analysis Time..: 02:54

Analysis Date..: 11/21/01

Dilution Factor: 1

*

		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Ethane	ND	0.50	ug/L	RSK SOP-175
Ethene	ND	0.50	ug/L	RSK SOP-175
Methane	ND	0.50	ug/L	RSK SOP-175

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: DIK150277 Work Order #...: EN29M1A3-MS Matrix..... WATER

MS Lot-Sample #: D1K150277-006 EN29M1A4-MSD

Date Sampled...: 11/12/01 17:00 Date Received..: 11/14/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332454 Analysis Time..: 05:47

Dilution Factor: 1

PARAMETER Ethane	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Bullane	93	(68 ~ 104)			RSK SOP-175
_	92	(68 - 104)	1.1	(0-14)	RSK SOP-175
Ethene	85	(69 - 102)			RSK SOP-175
	86	(69 - 102)	0.53	(0-15)	RSK SOP-175
Methane	94	(23 - 148)		,	RSK SOP-175
	94	(23 - 148)	0.28	(0-21)	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: D1K150277 Work Order #...: EN29M1A3-MS Matrix....: WATER MS Lot-Sample #: D1K150277-006

EN29M1A4-MSD

Date Sampled...: 11/12/01 17:00 Date Received..: 11/14/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332454 Analysis Time..: 05:47

Dilution Factor: 1

PARAMETER Ethane Ethene	SAMPLE AMOUNT ND ND ND	AMT 67.8 67.6	MEASRD AMOUNT 62.7 62.1 53.9	UNITS ug/L ug/L ug/L	PERCENT RECOVERY 93 92 85	1.1	METHOD RSK SOP-175 RSK SOP-175 RSK SOP-175
Methane	ND 2.6 2.6	63.2 36.2 36.1	54.2 36.7 36.6	ug/L ug/L ug/L	94	0.53	RSK SOP-175 RSK SOP-175 RSK SOP-175
NOTE(S).							=

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D1K150277

Matrix....: WATER

PERCENT RECOVERY PREPARATIONPARAMETER RECOVERY LIMITS METHOD ANALYSIS DATE WORK ORDER #

LCS Lot-Sample#: D1K200000-582 Prep Batch #...: 1324582

Iron 103 (92 - 114) SW846 6010B

11/20-11/27/01 EPC4X1AD

Dilution Factor: 1 Analysis Time..: 09:49

Manganese 95 (89 - 114) SW846 6010B 11/20-11/27/01 EPC4X1AE

Dilution Factor: 1
Analysis Time..: 23:04

NOTE(S):

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #	: D1K	150277					Matrix:	WATER
PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY		D	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: D1K200000-582 Prep Batch #: 1324582								
Iron	1.00	1.03	mg/L	103	SW846	6010B	11/20-11/27/01	EPC4X1AD
		D	ilution Factor	: 1				
		A	nalysis Time	: 09:49				
Manganese	0.500	0.475	mg/L	95	SW846	6010B	11/20-11/27/01	EPC4X1AE
			ilution Factor					
		A	nalysis Time	: 23:04				

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: D1K150277 Matrix..... WATER

PARAMETER	RESULT	REPORTING LIMIT UN	NITS M	ETHOD		PREPARATION - ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #	: D1K200000-58	2 Prep Batch	#: 132	4582			
Iron		0.10 mg ilution Factor:	1	W846 601	LOB	11/20-11/27/01	EPC4X1AA
Manganese		0.010 mg ilution Factor: : nalysis Time: 2	1	W846 601	.0B	11/20-11/27/01	EPC4X1AC

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D1K150277 Matrix..... WATER Date Sampled...: 11/12/01 17:00 Date Received..: 11/14/01 PERCENT RECOVERY RPD PREPARATION-WORK PARAMETER RECOVERY LIMITS RPD LIMITS ANALYSIS DATE ORDER # MS Lot-Sample #: D1K150277-006 Prep Batch #...: 1324582 Iron NC, MSB (92 - 114)SW846 6010B 11/20-11/27/01 EN29M1A5 NC, MSB (92 - 114)(0-20) SW846 6010B 11/20-11/27/01 EN29M1A6 Dilution Factor: 1 Analysis Time..: 10:08 Manganese 94 (89 - 114)SW846 6010B 11/20-11/27/01 EN29M1A7 92 (89 - 114) 0.78 (0-20) SW846 6010B 11/20-11/27/01 EN29M1A8 Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

Analysis Time..: 23:30

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lo Date Samp				7:00 Date Receiv	red: 11/14/	01	Matri	x WAT	ER
PARAMETER	SAMPLE AMOUNT		MEAS!		PERCNT RECVRY RPD	METHO	D	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-San	mple #:	D1K15	0277-	006 Prep Batch	#: 132458	2			
	55.3	1.00	63.7	mg/L Qualifiers: NC,	MSB	SW846	6010B	11/20-11/27/01	EN29M1A5
	55.3	1.00	63.4	mg/L Qualifiers: NC,1 Dilution Factor: 1 Analysis Time: 10	MSB	SW846	6010B	11/20-11/27/01	EN29M1A6
Manganese									
	1.3	0.500	1.75	mg/L	94	SW846	6010B	11/20-11/27/01	EN29M1A7
	1.3	0.500	1.73	mg/L Dilution Factor: 1 Analysis Time: 23		SW846	6010B	11/20-11/27/01	

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #:	D1K150277			Matrix	: WATER
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: Sodium	D1K200000- 103	312 Prep Bat (91 - 111) Dilution Facto Analysis Time.		11/20-11/27/01	EPALF1AH
Calcium	103	(88 - 108) Dilution Factor Analysis Time.		11/20-11/27/01	EPALF1AJ
Iron	101	(92 - 114) Dilution Factor Analysis Time.	c: 1	11/20-11/27/01	EPALF1AK
Magnesium	103	(93 - 113) Dilution Factor Analysis Time	: 1	11/20-11/27/01	EPALF1AL
Manganese	100	(89 - 114) Dilution Factor Analysis Time	: 1	11/20-11/27/01	EPALFlam
Potassium		(87 - 110) Dilution Factor Analysis Time	: 1	11/20-11/27/01	EPALF1AN

LABORATORY CONTROL SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #: D1K150277 Matrix: W.							WATER	
PARAMETER	SPIKE AMOUNT	MEASUI AMOUN		PERCNT RECVRY	r METHO	D	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Samp	ole#: D1K	200000	-312 Prep Bat	ch #	: 1324	312		
Sodium	50.0	51.3	mg/L Dilution Factor Analysis Time.	103 r: 1		6010B	11/20-11/27/01	EPALFIAH
Calcium	50.0	51.4	mg/L Dilution Factor Analysis Time		SW846	6010B	11/20-11/27/01	EPALF1AJ
Iron	1.00	1.01	mg/L Dilution Factor Analysis Time		SW846	6010B	11/20-11/27/01	EPALF1AK
Magnesium	50.0	51.3	mg/L Dilution Factor Analysis Time		SW846	6010B	11/20-11/27/01	EPALF1AL
Manganese	0.500	0.499	mg/L Dilution Factor Analysis Time		SW846	6010B	11/20-11/27/01	EPALF1AM
Potassium	50.0	46.6	mg/L Dilution Factor Analysis Time		SW846	6010B	11/20-11/27/01	EPALFIAN
NOTE(S):								

METHOD BLANK REPORT

DISSOLVED Metals

Client Lot #...: D1K150277 Matrix....: WATER

		REPORTING			PREPARATION-	WORK
PARAMETER	RESULT	LIMIT UN	NITS METH	IOD	ANALYSIS DATE	ORDER #
						<u> </u>
MB Lot-Sample		0-312 Prep Batch	1,#: 132431	.2		
Calcium	ND	0.20 mg	J/L SW84	6 6010B	11/20-11/27/01	EPALF1AC
		Dilution Factor:	-		. ,	
		Analysis Time:	16:53			
Iron	ND	0.10 ma	r/L SW84	6 6010B	11/20 11/27/01	
		Dilution Factor:		0 00102	11/20-11/27/01	CPALFIAD
		Analysis Time:	16:53			
Magnesium	ND	0.20 ma	/7 9770			
	110	Dilution Factor:		6 6010B	11/20-11/27/01	EPALFIAE
		Analysis Time:				
		Analysis lime:	16:53			
Manganese	ND	0.010 mg	/L SW84	6 6010B	11/20-11/27/01	קאוק.דואם
		Dilution Factor: 3		. –	/	ELADE LAF
		Analysis Time: 1	16:53			
Potassium	ND	3.0 mg	/T. SM0//	6 6010B	77/00 77/05/65	
		Dilution Factor: 1		O OOLOB	11/20-11/27/01	EPALF1AG
		Analysis Time: 1				
Sodium	ND	5.0 mg/	/T			
	112	Dilution Factor: 1		6010B	11/20-11/27/01	EPALF1AA
	•	Analysis Time: 1		•		
		Amarysis lime: 1	.0:03			
NOTE(S):						

MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

	#: D1K15	ed: 11/14/01	Matrix: WATER	
PARAMETER	PERCENT RECOVERY	RECOVERY RPD LIMITS RPD LIMIT	rs method	PREPARATION- WORK ANALYSIS DATE ORDER #
MS Lot-Samp	ple #: D1K15	0277-006 Prep Batch #	‡: 1324312	
Calcium	97 109 N	(88 - 108) (88 - 108) 3.0 (0~20 Dilution Factor: 1 Analysis Time: 17	SW846 6010B)) SW846 6010B	11/20-11/27/01 EN29M1C 11/20-11/27/01 EN29M1C
Iron	99 104	(92 - 114) (92 - 114) 4.4 (0-20 Dilution Factor: 1 Analysis Time: 17:		11/20-11/27/01 EN29M1C 11/20-11/27/01 EN29M1C
Magnesium	103 111	(93 - 113) (93 - 113) 3.6 (0-20 Dilution Factor: 1 Analysis Time: 17:		11/20-11/27/01 EN29M1C0
Manganese	98 102	(89 - 114) (89 - 114) 3.2 (0-20 Dilution Factor: 1 Analysis Time: 17:		11/20-11/27/01 EN29M1CI 11/20-11/27/01 EN29M1CI
Potassium	9 <u>4</u> 98	(87 - 110) (87 - 110) 4.1 (0-20 Dilution Factor: 1 Analysis Time: 17:		11/20-11/27/01 EN29M1CI 11/20-11/27/01 EN29M1CM
Sodium	102 108	(91 - 111) (91 - 111) 3.2 (0-20) Dilution Factor: 1 Analysis Time: 17:		11/20-11/27/01 EN29M1A9 11/20-11/27/01 EN29M1CA

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

 $N\quad \mbox{Spiked analyte recovery is outside stated control limits.}$

MATRIX SPIKE SAMPLE DATA REPORT

DISSOLVED Metals

Client Lo Date Samp	ot # pled	: D1K1 : 11/1	.50277 .2/01 17:00	Date Rece	eived:	11/14	/01	Mat	rix WATE	er.
PARAMETER	SAMPL	E SPIK	E MEASURED		PERCI)D		WORK ORDER #
MS Lot-Sa Calcium	mple #	: D1K1	50277-006	Prep Bato	:h #:	13243	12			
	136 136	50.0 50.0		mg/L mg/L tion Factor:		3.0		6010B	11/20-11/27/01 1 11/20-11/27/01 1	EN29M1CC EN29M1CC
			Anal	ysis Time:	17:16					
Iron	ND ND	1.00		mg/L mg/L tion Factor: ysis Time:		4.4		6010B 6010B	11/20-11/27/01 E 11/20-11/27/01 E	EN29M1CE EN29M1CF
Magnesium										
	55.8 55.8	50.0		mg/L mg/L ion Factor: sis Time:		3.6	SW846 SW846		11/20-11/27/01 E 11/20-11/27/01 E	N29M1CG N29M1CH
Manganese										
•	0.080 0.080	0.500	Dilut	mg/L mg/L ion Factor: : sis Time: :		3.2	SW846 SW846		11/20-11/27/01 EI 11/20-11/27/01 EI	N29M1CJ N29M1CK
Potassium										
_		50.0 50.0		mg/L mg/L .on Factor: 1 .is Time: 1		4.1	SW846 SW846		11/20-11/27/01 EN 11/20-11/27/01 EN	129M1CL 129M1CM
Sodium										
5			107 Diluti	mg/L mg/L on Factor: 1 is Time: 1			SW846 6 SW846 6		11/20-11/27/01 EN 11/20-11/27/01 EN	29M1A9 29M1CA
NOTE(S):										

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: D1K150277 Matrix....: WATER

	PERCENT	RECOVERY RPI)	PREPARATION-	PREP
PARAMETER	RECOVERY	LIMITS RPD LIN	MITS METHOD	ANALYSIS DATE	BATCH #
Ammonia as N	•	WO#:EN75E1AC-LCS	S/EN75ElAD-LCSD LCS	Lot-Sample#: D1K1	80000-111
	105	(90 - 110)	MCAWW 350.1	11/17/01	1322111
	106	(90 - 110) 0.75 (0-	-10) MCAWW 350.1	11/17/01	1322111
		Dilution Factor:			
Nitrate-Nitr	ite	WO#:EPD471AC-LCS	S/EPD471AD-LCSD LCS	Lot-Sample#: D1K2	10000-277
	105	(90 - 110)	MCAWW 353.2	11/20/01	
	106	(90 - 110) 0.11 (0-	10) MCAWW 353.2	11/20/01	1325277
		Dilution Factor:	1		
Total Alkali	nity	WO#:EPGPX1AC-LCS	S/EPGPX1AD-LCSD LCS	Lot-Sample#: D1K2	50000-370
	98		MCAWW 310.1		
	101	(95 - 110) 2.2 (0-	10) MCAWW 310.1	11/21/01	1330370
		Dilution Factor:	1		
Total Dissol	ved	WO#:EPC5PlAC-LCS	/EPC5PlAD-LCSD LCS	Lot-Sample#: D1K16	50000-536
	95	(86 - 106)	MCAWW 160.1	11/16/01	1320536
·	100	(86 - 106) 4.9 (0-		11/16/01	
		Dilution Factor: 1		,, . =	
Total Organio	Carbon	WO#:EPLWG1AC-LCS	/EPLWG1AD-LCSD LCS 1	Lot-Sample#: D1K28	30000-417
	104		MCAWW 415.1	11/27-11/28/01	

Dilution Factor: 1

(90 - 110) 1.4 (0-10) MCAWW 415.1 11/27-11/28/01 1332417

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

103

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #: D1K150277	Matrix: WATER
-------------------------	---------------

<u>PARAMETI</u> Ammonia		MEASUREI AMOUNT WO# 4.20 4.23	UNITS :EN75E1AC mg/L mg/L	PERCNT RECVRY -LCS/EN 105 106	75E1A	D-LCSD	LCS Lot-Sa 350.1	PREPARATION- ANALYSIS DATE mple#: D1K18000 11/17/01	1322111
		D	ilution Fac		0.75	PICHWW	350.1	11/17/01	1322111
Nitrate-	-Nitrite 4.00	WO#	:EPD471AC	-LCS/EPI 105	0471A	D-LCSD MCAWW	LCS Lot-Sar	mple#: D1K21000	0-277 1325277
	4.00	4.22	mg/L	106	0.11	MCAWW		11/20/01	1325277
		D	ilution Fact	or: 1					
Total Al	kalinity.	WO#	:EPGPX1AC	-LCS/EPG	PX1A	D-LCSD	LCS Lot-Sar	mple#: D1K26000	1-370
	185	182	mg/L	98		MCAWW	310.1	11/21/01	1330370
	185	186	mg/L	101	2.2	MCAWW	310.1	11/21/01	1330370
		D;	ilution Fact	or: 1					
Total Di Solids	= =-	WO#	:EPC5P1AC-	-LCS/EPC	5P1AI	D-LCSD	LCS Lot-Sam	nple#: D1K160000	-536
	500	476	mg/L	95		MCAWW	160.1	11/16/01	1320536
	500	500	mg/L	100	4.9	MCAWW	160.1	11/16/01	1320536
		נע	lution Fact	or: 1					
Total Org	ganic Carbon	WO# :	EPLWG1AC-	LCS/EPL	WGlAI	-LCSD	LCS Lot-Sam	ple#: D1K280000	-417
	25.0	26.1	mg/L	104		MCAWW		11/27-11/28/01	
	25.0		•		1.4	MCAWW		11/27-11/28/01	
		Di	lution Facto	or: 1					

NOTE(S):

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: D1K150277

Matrix..... WATER

PARAMETER Chloride	PERCENT RECOVERY	RECOVERY LIMITS METHOD Work Order #: EPADX1AC LCS I (92 - 109) MCAWW 325.2 Dilution Factor: 1 Analysis Time: 13:00	PREPARATION- PREP ANALYSIS DATE BATCH # Lot-Sample#: D1K200000-259 11/16/01 1324259
Sulfate	94	Work Order #: EPJ5N1AC LCS I (88 - 110) MCAWW 375.4 Dilution Factor: 1 Analysis Time: 13:00	Lot-Sample#: D1K270000-468 11/27/01 1331468

NOTE(S):

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: D1K150277

Matrix..... WATER

PARAMETER Chloride	SPIKE AMOUNT	MEASUR AMOUNT	UNITS			PREPARATION -	PREP BATCH #
	50.0	50.0	mg/L Dilution Factor: Analysis Time:	100	MCAWW 325.2	11/16/01	1324259
Sulfate	25.0	23.5		94 1	.AC LCS Lot-Sample MCAWW 375.4		58 1331468

NOTE(S):

METHOD BLANK REPORT

General Chemistry

Client Lot #...: D1K150277

	crienc nor #:	DIKTOUZII			Mat	rix W.	ATER
	PARAMETER Ammonia as N	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
		ND	0.10 Dilution Fact	mg/L or: 1	A MB Lot-Sample #: MCAWW 350.1	11/17/01	1322111
	Chloride	ND	Work Order 2.5 Dilution Fact Analysis Time	mg/L or: 1	A MB Lot-Sample #: MCAWW 325.2	D1K200000-259 11/16/01	1324259
1	Nitrate-Nitrite	ND	Work Order 0.10 Dilution Fact Analysis Time	mg/L or: 1	MB Lot-Sample #: MCAWW 353.2	D1K210000-277 11/20/01	1325277
2	Sulfate	ND	Work Order 5.0 Dilution Factor Analysis Time	mg/L pr: 1	MB Lot-Sample #: MCAWW 375.4	D1K270000-468 11/27/01	1331468
T	otal Alkalinity	ND	Work Order 5.0 Dilution Factor Analysis Time.	mg/L or: 1	MB Lot-Sample #: MCAWW 310.1	D1K260000-370 11/21/01	1330370
Т	otal Dissolved Solids		Work Order	#: EPC5P1AA	MB Lot-Sample #:	D1K160000-536	
		ND	10.0 Dilution Facto Analysis Time.		MCAWW 160.1	11/16/01	1320536
T	otal Organic Carb	on ND	Work Order # 1.0 Dilution Factor Analysis Time.	mg/L r: 1		D1K280000-417 11/27-11/28/01	1332417

NOTE(S):

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot # Date Sampled	: D1K1	50277 2/01 1	.7:00 Date Red	ceived: 11/14/01	Matrix	: WATER
	PERCENT RECOVERY 85 N 84 N	(90 -	S RPD LI WO#: EN29M10	CWITS METHOD CV-MS/EN29M1CW-MSD MCAWW 350.1 0-10) MCAWW 350.1 r: 1	PREPARATION- ANALYSIS DATE MS Lot-Sample #: D 11/17/01 11/17/01	
Nitrate-Nitri	88 N	(90 -	109) 1.1 (0 Dilution Factor Analysis Time WO#: EN29M1C2 110)	MCAWW 325.2 -10) MCAWW 325.2 : 1 : 13:00	MS Lot-Sample #: D:	1324259 1324259
	98	(88 - (88 -	Dilution Factor Analysis Time WO#: EN29M1CQ	: 1 : 15:00 Q-MS/EN29M1CR-MSD MCAWW 375.4 :11) MCAWW 375.4	MS Lot-Sample #: D1 11/27/01 11/27/01	
	.05 (90 - 1 90 - 1	WO#: EN29M1CT 110)	'-MS/EN29M1CU-MSD MCAWW 415.1 10) MCAWW 415.1	MS Lot-Sample #: D1 11/27-11/28/01 11/27-11/28/01	1332417

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #: D1K150277	Matrix WATER
Date Sampled: 11/12/01 17:00 Date Received: 11/14/01	

PARAMETER Ammonia as	AMOUNT		4.34 N 4.26 N Dilut:	UNITS EN29M1CV-MS mg/L mg/L ion Factor: 1 sis Time: 08:	85 84		METHOD D MS Lot-Sam MCAWW 350.1 MCAWW 350.1	PREPARATION- <u>ANALYSIS DATE</u> ple #: D1K150277 11/17/01 11/17/01	PREP <u>BATCH #</u> -006 1322111 1322111
Chloride			WO#:	EN29M1CN-MS	/EN29M10	CP-MS	D MS Lot-Sam	ple #: D1K150277	-006
	80.1	50.0	132	mg/L	103		MCAWW 325.2	11/16/01	1324259
	80.1	50.0	130	mg/L	100	1.1	MCAWW 325.2	11/16/01	1324259
			Diluti	on Factor: 1			•	,,	1324233
			Analys	sis Time: 13:	00				
Nitrate-Nit	rite		WO#:	EN29M1CX-MS/	/EN29M1C	:0-MS	D MS Lot-Samm	ole #: D1K150277	-006
	3.1	5.00	7.55 N	mg/L	88		MCAWW 353.2	11/20/01	1325277
	3.1	5.00	7.50 N	mg/L	87	0.69	MCAWW 353.2	11/20/01	1325277
			Diluti	on Factor: 1				/20/01	1323277
			Analys	is Time: 15:(00				
Sulfate			WO#:	EN29M1CO-MS/	'EN29M1C	R-MSI	O MS Lot-Samr	ole #: D1K150277-	.006
	231	250	476	mg/L	98		MCAWW 375.4	11/27/01	133146
	231	250	478	mg/L	99	0.54	MCAWW 375.4	11/27/01	1331468
			Diluti	on Factor: 1				# 1 /2//01	1221400
			Analys	is Time: 13:0	0				
Total Organ	ic Carb	on	WO#: :	EN29M1CT-MS/	EN29M1C	U-MSI) MS Lot-Samp	le #: D1K150277-	006
	2.4	25.0	28.6	mg/L	105		MCAWW 415.1		
	2.4	25.0	28.6				MCAWW 415.1	11/27-11/28/01	
			Dilutio	on Factor: 1	-			/2//20/UI	T3324T/

Analysis Time..: 07:00

NOTE(S):

 $^{\,}N\,\,$ Spiked analyte recovery is outside stated control limits.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: D1K150277 Work Order #...: EN239-SMP Matrix....: WATER

EN239-DUP Date Sampled...: 11/15/01 07:30 Date Received..: 11/15/01

% Moisture....: 100 Dilution Factor: Initial Wgt/Vol:

DUPLICATE RPD PREPARATION-PREP PARAM RESULT RESULT UNITS RPD LIMIT METHOD ANALYSIS DATE BATCH #

Total Alkalinity SD Lot-Sample #: D1K150266-001

44.3 44.5 mg/L 0.54 (0-10) MCAWW 310.1 11/21/01 1330370 Dilution Factor: 1 Analysis Time..: 09:00

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: D1K150277 Work Order #...: EN29M-SMP Matrix....: WATER EN29M-DUP Date Received..: 11/14/01 Date Sampled...: 11/12/01 17:00 Dilution Factor: % Moisture....: Initial Wgt/Vol: DUPLICATE RPD PREPARATION-PREP PARAM RESULT RESULT METHOD UNITS RPD LIMIT ANALYSIS DATE BATCH # Total Dissolved SD Lot-Sample #: D1K150277-006 Solids 1070 G 1020 G mg/L 4.8 (0-20)MCAWW 160.1 11/16/01 1320536 Dilution Factor: 2 Analysis Time..: 17:00

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

HOLD TIME REPORT

CAMERON-COLE LLC

Wichita, KS

HOLD TIME REPORT

Lab: GCMS VOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif		Ana Hold	Extraction Date	Analysis Date		Method Description
D1K150277001	B-69-18	11/12/01 1	1:25			•					
			8260B		9		14		11/21/01	08:05	VCA
D1K150277002	TB-07	11/12/01 0	0:00					-			
			8260B		9		14		11/21/01	08:26	VCA
D1K150277003	FB-111201	11/12/01 1	7:00								
			8260B		9		14		11/21/01	08:48	VOA
D1K150277004	SK-B68	11/12/01 1	0:00								
			8260B		9		14		11/21/01	06:25	AOV
D1K150277005	SK-29S	11/12/01 1	3:30								
			8260B		9		14		11/21/01	06:04	VOA
D1K150277006	WND-32D	11/12/01 1	7:00								•
			8260B		9		14		11/21/01	07:01	VOA
D1K150277007	RB-111201	11/12/01 1	5:30								
			8260B		9		14		11/21/01	09:10	VOA

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GC VOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif	Ext Hold	Ana Hold	Extraction Date	Analysis Date		Method Description
D1K150277004	SK-B68	11/12/01 1	0:00								
			SOP-175		9		14		11/21/01	C 4 . E *	
			SOP-175		9		14		11/21/01		
D1K150277005	SK-29S	11/12/01 13	3:30						11/21/01	04:5	
			SOP-175		9		14		11/21/01	05.00	
			SOP-175		9		14		11/21/01		
D1K150277006	WND-32D	11/12/01 17	:00						11/21/01	05:10	
			SOP-175		9		14		11/21/01	05:16	

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: METALS

Lab ID #	Well ID	Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date	Analysis Date		Method Description
D1K150277004	SK-B68	11/12/01 10	0:00								
			6010B		15		180		11/27/01	17:01	ICP
			6010B		15		180		11/27/01		
			6010B		15		180		11/27/01		
D1K150277005	SK-29S	11/12/01 13	:30								
			6010B		15		180		11/27/01	17:05	ICP
			6010B		15		180		11/27/01		
			6010B		15		180		11/27/01	23:14	
D1K150277006	WND-32D	11/12/01 17:	:00								
			6010B		15		180		11/27/01	17:08	ICP
			6010B		15		180			10:01	
			6010B		15		180			23:20	

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

		0-11									* *
Lab ID #	Well ID	Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date	Analysis Date		Method Description
D1K150277004	SK-B68	11/12/01 10:	: 00								
			310.1		9		14		11/21/01	00.0	3 315-1: :
			310.1		9		14				O Alkalinity
			310.1		9		14				O Alkalinity
			415.1		16		28		11/21/01		Alkalinity
			325.2		4		28		11/26/01		
			353.2		8		28				
		•	160.1		4		7	•			Nitrate- Nitrite
			375.4		15		28		11/16/01	17:00	TDS
D1K150277005	SK-29S	11/12/01 13::	30				20		11/27/01	13:00	
			310.1		9		14				
		:	310.1		9		14				Alkalinity
		:	310.1		9		14				Alkalimity
			115.1		16		28				Alkalinity
		3	325.2		4		28		11/28/01		
		3	353.2		8		28		11/16/01		
		1	60.1		-				11/20/01	15:00	
			.60.1		4		7		11/16/01	17:00	Nitrite TDS
150277006	WND-32D	11/12/01 17:00	75.4		15	:	28		11/27/01	13:00	
			0 10.1		_						
			10.1		9		14		11/21/01	09:00	Alkalinity
					9	1	L 4				Alkalinity
		•	10.1		9	1	4				Alkalinity
			15.1		16		8		11/28/01		•
			25.2		4		18		11/16/01	13:00	
		35	53.2	8	3	2	8		11/20/01	15:00	Nitrate-
		16	50.1	4	1	7			11/16/01		Nitrite
		37	5.4	1	. 5	2	8		11/27/01		:05
									/-:/UL	لان:د،	

Chain of Custody Record

STL Denver 4955 Yarrow Street Arvada, CO 80002 5,5 - 5,80 7m



Severn Trent Laboratories, Inc.

STL-4124 (0700) DEN (0900)																									•
Client SAFety-Kleen (Wich. 12) Facily Address 2549 North New York. Ac City Wich. 12 State Zip	/it.	Project	Manago Kay one Nun	74	usc F	tn	(an	rera	- מצ	Co	<u>ر</u>)			D	ate [/	/13	101	,	C	Chain of Custoe			
Address 75546 M 10 M	7,	Teleph	one Nun	nber (A	rea Co	ode)/F	ax Nu	ynbe	r	·				-		Lá	b Nur	nber			+				
2) 99 North New York. AL	rence	303	-93	3 5 -	- 53	35	_/	3	3 ن	-9	38	ر-	<u>5</u> 2	20							1	Page3	(of _	3
wich.th KS C	7219	Sile Co Russ	ntact	Dun	1	Lat	Con	tact	ا م	der mor			re sp	alysis (Attach list if e space is needed)											
oject Name and Location (State) K Fredick Wich My ontract/Purchase Order/Quote No.			Waybill									(9	1/2	1	172	/v-v/	3/2					Snoo	ial las		/
Contract/Purchase Grder/Quote No.				Matrix	k					rs & lives		8260	3	240	tol	VH3	, , , ,					Condi	al Inst tions c		
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Sed.	Soil	Unpres	H2SO4	HNOS	HCI	NaOH	VaOH	<u>زمور</u> (1081	1.20	Coton	TO C/NH3 /N-1	11.26								
B-69-18	11/12/01	1125	X						3			X									+	 			
TB-07	11/12/01		X						2			X									\top				
FB-111201	11/12/01	1700		.					3			X													
5K-B68	11/12/01	1000	χ			1	1	2	6			X	X	X	X	X	X								
5K-295	11/12/01	1330	×			1	1	2	6			X	X	X	Z	Х	X								
WN10-320	4/12/01	1700	X			2	2	4	12		1	X	X	X		X		<u> </u>			1	MSMS	n		· · · · · · · · · · · · · · · · · · ·
RB-1/1201	11/2/01	1630	X						3			X										7,30,10			
			_	-				_		_		_		_						\perp					
						-			_	_			ļ							_	\perp				
				1-1	_	<u> </u>						\perp								\perp	\bot				
			_		_																				
																	ļ								
Possible Hazard Identification		_		ole Dis														(A)	lee ma	v be a	assas:	sed if samples	are ret:	ined	
Turn Around Time Required		Unknown		eturn	To Clie	ent	<u> </u>			y Lab	Specif		hive F	or _			/onths	s lon	ger tha	an 3 m	ionths	;)			
24 Hours 48 Hours 7 Days 14 Da	ys 🗌 21 Day	s 🗌 Oth	er							0,,,0	Opoon	,,													
24 Hours 1 48 Hours 7 Days 1 4 Day 1 Relinquished By average 2 Relinquished By	=	Date ////	3/01	Tim	Se a		1. R	eceiv	red B	3y T C) L	184			-							Date	Ti	me	
2 Relinquished B		Date		Tim	e		2. R	oceiv	ed B	Ву) <u>L</u>	///	11.		,							Date,		me	·
3. Relinquished By		Date		Tim	е		3	eceiv	red B	By	6		100	<u> </u>	7_							<u>*1 </u>	$\frac{\mathcal{I}_{i}}{ \mathcal{I}_{i} }$	10/ me	<i>></i>
Comments * Ths /hsp DISTRIBUTION: WHITE - Stays with the Sample: CANARY	ole Kan	TAUCH	Ger L		l m	17 G	, c. e	sti	ions	r			<u>.</u>									<u> </u>			
DISTRIBUTION: WHITE - Stays with the Sample: CANARY	r - Returned to Cl	ent with Rep	ort. PIN	K - Fie	ld Con	V													-						



STL Denver 4955 Yarrow Street Arvada, CO 80002-4517

Tel: 303 736 0100 Fax: 303 431 7171 www.stl-inc.com

ANALYTICAL REPORT

SAFETY KLEEN (WICHITA, KS)

Lot #: D1K130267

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue, Suite 100 Boulder, CO 80301

SEVERN TRENT LABORATORIES, INC.

Kae E. Yoder Project Manager

December 5, 2001

This report shall not be reproduced except in full, without the written approval of the laboratory

THE PROPERTY OF THE PROPERTY O

Severn Trent Laboratories, Inc.

Philadelphia, PA 19175-4305

Invoice

Tel

Fax:

STL Denver

4955 Yarrow Street

P.O. Box 7777 W4305

Arvada, CO 80002

(303) 421-6611

(303) 431-7171

SERVICES

Number

28032978

05 DEC 01

STL Project Number D1K130267 Customer Number 00408171

Terms

NET 30 DAYS

Customer Contact

SAMPLE RECEIVING DATE: 11/13/01

REPORT DATE : 12/05/01

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue

Suite 100

Boulder, CO 80301

John Arbuthnot Rill To: Safety Kleen Inc 13351 Scenic Highway Baton Rouge, LA 70807

Matrix Code Otv Analysis Description Unit Price Extended Price 16 WATER WATER, Total Fe/Mn, 6010B 16.00 256.00 16 WATER WATER, Dissolved Ca/Fe/K/Mq/Mn/Na, 6010B 48.00 768.00 16 WATER WATER, Total Dissolved Solids, 160.1 8.00 128.00 16 WATER WATER, Carbonate Alkalinity, 310.1 8.00 128.00 16 WATER WATER, Chloride, 325.2 8.00 128.00 16 WATER WATER, Nitrate-Nitrite, 353.2 8.00 128.00 WATER WATER, Total Organic Carbon, 415.1 16 23.00 368.00 16 WATER WATER, Sulfate, 375.4 10.00 160.00 16 WATER WATER, Bicarbonate Alkalinity, 310.1 8.00 128.00 16 WATER WATER, Total Alkalinity, 310.1 8.00 12 16 WATER WATER, Ammonia Nitrogen, 350.1 8.00 WATER WATER, Total Metals Digestion 16 3.00 48.00 16 WATER WATER, Dissolved Metals Digestion 3.00 48.00 WATER WATER, Dissolved Gases, RSK175 16 143.00 2,288.00 18 WATER WATER, Volatile Organics, 8260B 97.00 1,746.00

> NOTE: Applicable samples will be stored at no extra charge for a period of 30 days following the final report. Samples will be properly disposed of after 30 days, unless notified otherwise in writing.

Please reference Invoice number when remitting.

Customer P.O. Number / Contract Number / Reference

Sub Total

Tax

STL Project Manager Kae Yoder

Salesperson

Total

Table Of Contents

Standard Deliverables

Report Contents

Total Number of Pages

Standard Deliverables

The Cover Letter and the Report Cover page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.



- Table of Contents
- Case Narrative
- Executive Summary Detection Highlights
- Methods Summary
- Method/Analyst Summary
- Lot Sample Summary
- Analytical Results
- QC Data Association Summary
- Chain-of-Custody

CASE NARRATIVE

Client Name:

Safety-Kleen (Wichita)

Project Name: Project Number:

Sample Delivery Group: Narrative Date:

D1K130267 12/05/01

Namative Date.

Sample Receipt

- Sixteen water samples and two trip blanks, submitted by Safety-Kleen (Wichita), Inc., were received by STL Denver on November 13, 2001, according to documented sample acceptance procedures. The samples were received intact at temperatures of 4.9°C, 4.8°C, 3.8°C, 3.4°C, 3.4°C and 3.6°. Analyses requested on the associated chains-of-custody are as follows: GC/MS Volatiles, Dissolved Gases, Total and Dissolved Metals, and various General Chemistry parameters.
- As instructed by the client, the samples presented in this report were analyzed for Sulfate, Ammonia Nitrogen and Nitrate-Nitrite, in addition to the analyses requested on the chains-of-custody. The chains-of-custody have been revised to reflect this change.
- > Sampling dates and times were taken directly from the sample container labels, as the chain-of-custody did not list this information. No other anomalies were encountered during sample receipt.
- > The Dissolved Gases analyses presented in this report were performed at the STL Austin facility.

GC/MS Volatiles

> Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
SK-1S	cis-1,2-Dichloroethene	3.3	1.0	ug/L
	Tetrachloroethene	24	1.0	ug/L
	Trichloroethene	2.1	1.0	ug/L
SK-2S	i 1,1-Dichloroethane	17	8.0	ug/L
	cis-1,2-Dichloroethene	260	8.0	ug/L
	Tetrachloroethene	180	8.0	ug/L
	1,1,1-Trichloroethane	38	8.0	ug/L
	Trichloroethene	100	8.0	ug/L
SK-2D	cis-1,2,-Dichloroethene	39 !	4.0	ug/L
	Trichloroethene	210	4.0	ug/L
SK-3S	cis-1,2-Dichloroethene	6.7	2.0	ug/L
	Ethylbenzene	33	2.0	ug/L
	Isopropylbenzene	2.1	2.0	ug/L
	Naphthalene	3.8	2.0	ug/L
	n-Propylbenzene	6.7	2.0	ug/L
T	Tetrachloroethene	8.0	2.0	ug/L
	Toluene	87	2.0	ug/L
	Trichloroethene	35	2.0	ug/L
	1,2,4-Trimethylbenzene	55	2.0	ug/L
	1,3,5-Trimethylbenzene	13	2.0	ug/L
7-12 11 11 11 11 11 11 11 11 11 11 11 11 1	o-Xylene	44	2.0	ug/L
·	: m-Xylene & p-Xylene	120	4.0	ug/L
SK-3D	cis-1,2-Dichloroethene	11	2.0	ug/L
	Trichloroethene	69	2.0	ug/L
SK-4S	1,1-Dichloroethane	7.8	2.0 i	ug/L
	1,1-Dichloroethene	3.6	2.0	ug/L
	cis-1,2-Dichloroethene	45	2.0	ug/L

Sample ID	Parameter	Detection	RL	Units
SK-4S	Tetrachloroethene	76	2.0	ug/L
	1,1,1-Trichloroethane	11	2.0	ug/L
	Trichloroethene	12	2.0	ug/L
SK-4D	cis-1,2-Dichloroethene	11	2.0	ug/L
	Tetrachloroethene	3.5	2.0	ug/L
	Trichloroethene	63	2.0	ug/L ug/L
SK-5S	1,1-Dichloroethane	10	4.0	ug/L
	cis-1,2-Dichloroethene	120	4.0	ug/L
	Tetrachloroethene	230	4.0	ug/L
	1,1,1-Trichloroethane	24	4.0	ug/L
	Trichloroethene	90	4.0	ug/L
SK-5D	cis-1,2-Dichloroethene	20	4.0	ug/L
	Trichloroethene	120	4.0	ug/L
SK-6S	1,1-Dichloroethane	2.8	1.0	ug/L
	Tetrachloroethene	2.0	1.0	ug/L
SK-10S	1,1-Dichloroethane	11	4.0	ug/L
	cis-1,2-Dichloroethene	110	4.0	ug/L ug/L
	Tetrachloroethene	56	4.0	ug/L ug/L
	Trichloroethene	9.7	4.0	ug/L ug/L
	Vinyl chloride	51	4.0	ug/L
SK-26S	1,1-Dichloroethane	14	4.0	ug/L
	cis-1,2-Dichloroethene	140	4.0	ug/L
	Tetrachloroethene	67	4.0	ug/L
	Trichloroethene	12	4.0	ug/L
	Vinyl chloride	59	4.0	ug/L
SK-27S	cis-1,2-Dichloroethene	7.1	5.0	ug/L
	Ethylbenzene	32	5.0	ug/L
	n-Propylbenzene	6.2	5.0	ug/L
	Tetrachloroethene	9.2	5.0	ug/L
	Toluene	93	5.0	ug/L
	Trichloroethene	35	5.0	ug/L
	1,2,4-Trimethylbenzene	57	5.0	ug/L
	1,3,5-Trimethylbenzene	14	5.0	ug/L
	i o-Xylene	44 :	5.0	ug/L
	m-Xylene & p-Xylene	120	10	ug/L
SK-28S	n-Butylbenzene	5.4	1.0	ug/L
 	sec-Butylbenzene	2.4	1.0	ug/L
	cis-1,2-Dichloroethene	1.5	1.0	ug/L
·	Isopropylbenzene	1.9	1.0	ug/L
	Naphthalene	5.9	1.0 i	ug/L
	n-Propylbenzene	2.7	1.0	ug/L

- > The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. In some cases, due to analytes present above the linear calibration curve, samples had to be analyzed at a dilution. For samples analyzed at a dilution, the reporting limits have been adjusted relative to the dilution required. The following table details the associated dilutions.

Sample ID		Dilution
SK-2S	Ī	1:8
SK-2D	!	1:4
SK-3S	Ţ	1:2

Sample ID	Dilution
SK-3D	1:2
SK-4S	1:2
SK-4D	1:2
SK-5S	1:4
SK-5D	1:4
SK-10S	1:4
SK-26S	1:4
SK-27S	1:5

➤ Client specific MS/MSD were performed on samples SK-1S and SK-5D. All spike parameters were within QC control limits with the exception of the item noted in the following table. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data; therefore, corrective action is deemed unnecessary.

	QC Batch/	MS	MSD	Recovery		RPD
Parameter	Specific Sample	%Rec	%Rec	Limits	RPD	Limits
Trichloroethene	SK-5D	88	77	81-121	3.0	0-20

Dissolved Gases

> Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
SK-1S	Methane	0.70	0.50	ug/L
SK-1D	Methane	0.92	0.50	ug/L
SK-2S	Methane	160 E	0.50	ug/L
SK-2S RE	Methane	160 D	1.5	ug/L
SK-2D	Methane	1.7	0.50	ug/L
SK-3S	! Methane	1 7.4 1	0.50	ug/L
SK-3D	Methane	0.88	0.50	ug/L
SK-4S	₁ Methane	4.3	0.50	ug/L
SK-4D	Methane	1.9	0.50	ug/L
SK-5S	Methane	110 E	0.50	ug/L
SK-5S RE	1 Methane	1 110 D	1.0	ug/L
SK-5D	: Methane	1.2	0.50	ug/L
SK-6S	Methane	73	0.50	ug/L
SK-10S	Ethane	2.2	0.50	ug/L
	Methane	27	0.50	ug/L
SK-25D	Methane	1 0.98	0.50	ug/L
SK-26S	Ethane	2.3	0.50	ug/L
	Methane	27	0.50 i	ug/L
SK-27S	Methane	9.9	0.50 1	ug/L
SK-28S	Methane	620 E	0.50	ug/L :
SK-28S RE	Methane	1900 D	25 i	ug/L

- > The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Samples SK-2S, SK-5S and SK-28S contained Methane at concentrations that were above the instruments linear calibration curve. The results in the analytical report have been flagged with an "E", as these are estimated values. The samples were reanalyzed with the necessary dilutions. The reporting limits have been adjusted relative to the dilution required, and the results have been flagged with a "D", as these results were obtained from the analysis of a dilution. Both the original and reanalysis data have been provided for comparison.

Total and Dissolved Metals

- Sample analysis revealed detectable concentrations at or above Safety-Kleen (Wichita)'s RLs, as detailed in the Executive Summary-Detection Highlights Report. The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Percent recoveries and RPD data could not be calculated, for the Total Iron MS/MSD performed on sample SK-1S, due to the sample concentration reading greater than four times the spike amount.

General Chemistry

- Sample analysis revealed detectable concentrations at or above Safety-Kleen (Wichita)'s RLs, as detailed in the Executive Summary-Detection Highlights Report. The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. In some cases, due to interferences or high constituent concentration, analyses were performed at a dilution. For analyses performed at a dilution, results have been flagged accordingly, and the reporting limits have been adjusted relative to the dilution required. The following table details the associated dilutions.
 - Q = The reporting limit is elevated due to high analyte levels.
 - G = The reporting limit is elevated due to matrix interference.

Sample ID	Parameter	Dilution	Flag
SK-1S	Sulfate	1:10	Q
	Total Dissolved Solids	1:2	G
SK-1D	: Sulfate	1:10	Q
SK-2S	Sulfate	1:5	Q
	Total Dissolved Solids	1:5	G
SK-2D	Sulfate	1:10	Q
SK-3S	Sulfate	1:5	0
	Total Dissolved Solids	1:5	Ğ
SK-3D	Sulfate	1:10	Q
SK-4S	Sulfate	1:10	Q
	Total Dissolved Solids	1:10	Ğ
SK-4D	Sulfate	1:10	Q
SK-5S	Sulfate	1 1:2 1	Q
	Total Dissolved Solids	1:5	G
SK-5D	Sulfate	1:10	Q
SK-6S	Sulfate	1:2	Q
	Total Dissolved Solids	1:5	G
SK-10S	Sulfate	1:5	Q
	Total Dissolved Solids	1:10	Ğ
SK-25D	Sulfate	1:10	Q
SK-26S	Sulfate	1:5	Q
	Total Dissolved Solids	1:10	G
SK-27S	Sulfate	1:5	Q
	Total Dissolved Solids	1:2	G
SK-28S	Sulfate	1:5	Q
	Total Dissolved Solids	1:5	G

Please note that the Total Organic Carbon MS/MSD associated with QC batch 1330523 also supports QC batch 1330527. In addition, the Total Alkalinity Sample Duplicate analysis data associated with QC batches 1323551 and 1325370 also support QC batches 1323550 and 1325372, respectively.

These data and reporting limits are being used specifically to meet the needs of this project. All RLs are supported by STL Denver's Method Detection Limits (MDLs). Reporting limits in this report are at or above the MDL.

I certify that the data presented in this report are accurate, complete, and meets the minimum quality assurance standards in 40-CFR 136, 40-CFR 141, and/or SW846. The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. An assessment of the quality of the data, noting any exceptions, outliers, and/or problems encountered have been narrated herein.

Kae E. Yoder Project Manager Date

D1K130267

PARAMETER	PECII M	REPORTI		ANALYTICAL
	RESULT	<u>LIMIT</u>	UNITS	METHOD
SK-1S 11/11/01 08:15 001				
Methane	. 0.70	0.50	ug/L	RSK SOP-175
Calcium - DISSOLVED	131	0.20	mg/L	SW846 6010B
Magnesium - DISSOLVED	50.0	0.20	mg/L	SW846 6010B
Manganese - DISSOLVED	0.020	0.010	mg/L	SW846 6010B
Sodium - DISSOLVED	43.7	5.0	mg/L	SW846 6010B
Iron	56.6	0.10	mg/L	SW846 6010B
Manganese	0.54	0.010	mg/L	SW846 6010B
cis-1,2-Dichloroethene	3.3	/1.0	ug/L	SW846 8260B
Tetrachloroethene	24	1.0	ug/L	SW846 8260B
Trichloroethene	2.1	1.0	ug/L	SW846 8260B
Total Dissolved	1040 G	20.0	mg/L	MCAWW 160.1
Solids			3/ _	MCANN 100.1
Chloride	55.5	2.5	mg/L	MCAWW 325.2
Nitrate-Nitrite	1.7	0.10	mg/L	MCAWW 353.2
Total Organic Carbon	1.9	1.0	mg/L	MCAWW 415.1
Sulfate	315 Q	50.0	mg/L	MCAWW 375.4
Bicarbonate	260	5.0	mg/L	MCAWW 310.1
Alkalinity			57 —	110111111 310.1
Total Alkalinity	260	5.0	mg/L	MCAWW 310.1
SK-1D 11/11/01 07:45 002				
Methane	0.92	0.50	11 <i>c</i> /T	Day don 155
Calcium - DISSOLVED	164	0.20	ug/L mg/L	RSK SOP-175
Magnesium - DISSOLVED	62.9	0.20	-	SW846 6010B
Manganese - DISSOLVED	0.056	0.010	mg/L mg/L	SW846 6010B
Sodium - DISSOLVED	44.9	5.0	mg/L	SW846 6010B
Iron	0.35	0.10	mg/L	SW846 6010B
Manganese	0.069	0.010	mg/L	SW846 6010B
Total Dissolved	1000	10.0	mg/L	SW846 6010B
Solids	2000	10.0	11197 F	MCAWW 160.1
Chloride	50.6	2.5	mg/L	MCAWW 325.2
Nitrate-Nitrite	1.7	0.10	mg/L	MCAWW 353.2
Total Organic Carbon	3.5	1.0	mg/L	MCAWW 415.1
Sulfate	443 Q	50.0	mg/L	MCAWW 375.4
Bicarbonate	269	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	269	5.0	mg/L	MCAWW 310.1

D1K130267

	PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SK-2S	11/11/01 11:00 003				
	Methane	.160 E	0.50	ug/L	RSK SOP-175
	Methane	160 D	1.5	ug/L	RSK SOP-175
	Calcium - DISSOLVED	134	0.20	mg/L	SW846 6010B
	Iron - DISSOLVED	0.13	0.10	mg/L	SW846 6010B
	Potassium - DISSOLVED	3.3	3.0	mg/L	SW846 6010B
	Magnesium - DISSOLVED	35.7	0.20	mg/L	SW846 6010B
	Manganese - DISSOLVED	2.5	0.010	mg/L	SW846 6010B
	Sodium - DISSOLVED	72.2	5.0	mg/L	SW846 6010B
	Iron	385	0.10	mg/L	SW846 6010B
	Manganese	10.5	0.010	mg/L	SW846 6010B
	1,1-Dichloroethane	17	8.0	ug/L	SW846 8260B
	cis-1,2-Dichloroethene	260	8.0	ug/L	SW846 8260B
	Tetrachloroethene	180	8.0	ug/L	SW846 8260B
	1,1,1-Trichloroethane	38	8.0	ug/L	SW846 8260B
	Trichloroethene	100	8.0	ug/L	SW846 8260B
	Total Dissolved	825 G	50.0	mg/L	MCAWW 160.1
	Solids			•	
	Chloride	80.8	2.5	mg/L	MCAWW 325.2
	Total Organic Carbon	5.2	1.0	mg/L	MCAWW 415.1
	Sulfate	132 Q	25.0	mg/L	MCAWW 375.4
	Bicarbonate	423	5.0	mg/L	MCAWW 310.1
	Alkalinity			•	
	Total Alkalinity	423	5.0	mg/L	MCAWW 310.1
	Ammonia as N	0.13	0.10	mg/L	MCAWW 350.1
SK-2D	11/11/01 11:30 004				
	Methane	1.7	0.50	ug/L	RSK SOP-175
	Calcium - DISSOLVED	141	0.20	mg/L	SW846 6010B
	Magnesium - DISSOLVED	56.8	0.20	mg/L	SW846 6010B
	Manganese - DISSOLVED	0.61	0.010	mg/L	SW846 6010B
	Sodium - DISSOLVED	50.1	5.0	mg/L	SW846 6010B
	Iron	3.3	0.10	mg/L	SW846 6010B
	Manganese	0.87	0.010	mg/L	SW846 6010B
	cis-1,2-Dichloroethene	39	4.0	ug/L	SW846 8260B
	Trichloroethene	210	4.0	ug/L	SW846 8260B
	Total Dissolved Solids	895	10.0	mg/L	MCAWW 160.1
	Chloride	56.0	2.5	mg/L	MCAWW 325.2
	Nitrate-Nitrite	3.3	0.10	mg/L	MCAWW 353.2
	Total Organic Carbon	16.9	1.0	mg/L	MCAWW 415.1
	Sulfate	287 Q	50.0	mg/L	MCAWW 375.4
	Bicarbonate	347	5.0	mg/L	MCAWW 310.1
	Alkalinity	- -·		٠.	

D1K130267

		•			
			REPORTING		ANALYTICAL
	PARAMETER	RESULT	LIMIT	UNITS	METHOD
SK-2I	0 11/11/01 11:30 004				
	Total Alkalinity	347	5.0	mg/L	MCAWW 310.1
SK-3S	3 11/11/01 10:05 005		•		·
	Methane	7.4	0.50	ug/L	RSK SOP-175
	Calcium - DISSOLVED	102	0.20	mg/L	SW846 6010B
	Potassium - DISSOLVED	3.3	3.0	mg/L	SW846 6010B
	Magnesium - DISSOLVED	35.8	0.20	mg/L	SW846 6010B
	Manganese - DISSOLVED	0.94	0.010	mg/L	SW846 6010B
	Sodium - DISSOLVED	46.8	5.0	mg/L	SW846 6010B
	Iron	21.5	0.10	mg/L	SW846 6010B
	Manganese	1.1	0.010	mg/L	SW846 6010B
	cis-1,2-Dichloroethene	6.7	2.0	ug/L	SW846 8260B
	Ethylbenzene	33	2.0	ug/L	SW846 8260B
	Isopropylbenzene	2.1	2.0	ug/L	SW846 8260B
	Naphthalene	3.8	2.0	ug/L	SW846 8260B
	n-Propylbenzene	6.7	2.0	ug/L	SW846 8260B
	Tetrachloroethene	8.0	2.0	ug/L	SW846 8260B
	Toluene	87	2.0	ug/L	SW846 8260B
	Trichloroethene	35	2.0	ug/L	SW846 8260B
	1,2,4-Trimethylbenzene	55	2.0	ug/L	SW846 8260B
	1,3,5-Trimethylbenzene	13	2.0	ug/L	SW846 8260B
	o-Xylene	44	2.0	ug/L	SW846 8260B
	m-Xylene & p-Xylene	120	4.0	ug/L	SW846 8260B
	Total Dissolved Solids	1000 G	50.0	mg/L	MCAWW 160.1
	Chloride	53.4	2.5	mg/L	MCAWW 325.2
	Nitrate-Nitrite	5.8	0.10	mg/L	MCAWW 353.2
	Total Organic Carbon	5.9	1.0	mg/L	MCAWW 415.1
	Sulfate	167 Q	25.0	mg/L	MCAWW 375.4
	Bicarbonate Alkalinity	282	5.0	mg/L	MCAWW 310.1
	Total Alkalinity	282	5.0	mg/L	MCAWW 310.1
SK-3D	11/11/01 10:35 006				
	Methane	0.88	0.50	ug/L	RSK SOP-175
	Calcium - DISSOLVED	106	0.20	mg/L	SW846 6010B
	Magnesium - DISSOLVED	40.5	0.20	mg/L	SW846 6010B
	Manganese - DISSOLVED	0.33	0.010	mg/L	SW846 6010B
	Sodium - DISSOLVED	44.6	5.0	mg/L	SW846 6010B
	Iron	11.3	0.10	mg/L	SW846 6010B
	Manganese	0.55	0.010	mg/L	SW846 6010B
				-	

D1K130267

		•			
			REPORTING		ANALYTICAL
	PARAMETER	RESULT	LIMIT	UNITS	METHOD
SK-3D	11/11/01 10:35 006				
	cis-1,2-Dichloroethene	11	2.0	ug/L	SW846 8260B
	Trichloroethene	69	2.0	ug/L	SW846 8260B
	Total Dissolved	649	10.0	mg/L	MCAWW 160.1
	Solids				
	Chloride	52.0	2.5	mg/L	MCAWW 325.2
	Nitrate-Nitrite	5.1	0.10	mg/L	MCAWW 353.2
	Total Organic Carbon	20.0	1.0	mg/L	MCAWW 415.1
	Sulfate	189 Q	50.0	mg/L	. MCAWW 375.4
	Bicarbonate	285	5.0	mg/L	MCAWW 310.1
	Alkalinity				
	Total Alkalinity	285	5.0	mg/L	MCAWW 310.1
	-				
SK-4S	11/11/01 09:40 007				
	Methane	4.3	0.50	ug/L	RSK SOP-175
	Calcium - DISSOLVED	138	0.20	mg/L	SW846 6010B
	Potassium - DISSOLVED	3.3	3.0	mg/L	SW846 6010B
	Magnesium - DISSOLVED	38.3	0.20	mg/L	SW846 6010B
	Manganese - DISSOLVED	1.8	0.010	mg/L	SW846 6010B
	Sodium - DISSOLVED	43.1	5.0	mg/L	SW846 6010B
	Iron	0.85	0.10	mg/L	SW846 6010B
	Manganese	1.9	0.010	mg/L	SW846 6010B
	1,1-Dichloroethane	7.8	2.0	ug/L	SW846 8260B
	1,1-Dichloroethene	3.6	2.0	ug/L	SW846 8260B
	cis-1,2-Dichloroethene	45	2.0	ug/L	SW846 8260B
	Tetrachloroethene	76	2.0	ug/L	SW846 8260B
	1,1,1-Trichloroethane	11	2.0	ug/L	SW846 8260B
	Trichloroethene	12	2.0	ug/L	SW846 8260B
	Total Dissolved Solids	1030 G	100	mg/L	MCAWW 160.1
	Chloride	36.9	2.5	mg/L	MCAWW 325.2
	Nitrate-Nitrite	1.3	0.10	mg/L	MCAWW 353.2
	Total Organic Carbon	2.9	1.0	mg/L	MCAWW 415.1
	Sulfate	190 Q	50.0	mg/L	MCAWW 375.4
	Bicarbonate	386	5.0	mg/L	MCAWW 310.1
	Alkalinity			3.	•
	Total Alkalinity	386	5.0	mg/L	MCAWW 310.1
SK-4D	11/11/01 15:15 008				
		1 0	0.50	/7	DCV COD 175
	Methane	1.9	0.50	ug/L	RSK SOP-175
	Calcium - DISSOLVED	120	0.20	mg/L	SW846 6010B
	Potassium - DISSOLVED	3.0	3.0	mg/L	SW846 6010B

D1K130267

PARAMETER	RESULT	REPORTI LIMIT	NG UNITS	ANALYTICAL METHOD
	-		011210	<u></u>
SK-4D 11/11/01 15:15 008				
Magnesium - DISSOLVED	45.7	0.20	mg/L	SW846 6010B
Manganese - DISSOLVED	1.4	0.010	mg/L	SW846 6010B
Sodium - DISSOLVED	50.0	5.0	mg/L	SW846 6010B
Iron	0.50	0.10	mg/L	SW846 6010B
Manganese	1.5	0.010	mg/L	SW846 6010B
cis-1,2-Dichloroethene	11	2.0	ug/L	SW846 8260B
Tetrachloroethene	3.5	2.0	ug/L	SW846 8260B
Trichloroethene	63	2.0	ug/L	SW846 8260B
Total Dissolved Solids	767	10.0	mg/L	MCAWW 160.1
Chloride	65.1	2.5	mg/L	MCAWW 325.2
Nitrate-Nitrite	3.1	0.10	mg/L	MCAWW 353.2
Total Organic Carbon	4.2	1.0	mg/L	MCAWW 415.1
Sulfate	190 Q	50.0	mg/L	MCAWW 415.1 MCAWW 375.4
Bicarbonate	338	5.0	mg/L	MCAWW 310.1
Alkalinity		5.0	9/ 2	MCAWW SIU.I
Total Alkalinity	338	5.0	mg/L	MCAWW 310.1
SK-5S 11/11/01 12:05 009				
Methane	110 E	0.50	ug/L	RSK SOP-175
Methane	110 D	1.0	ug/L	RSK SOP-175
Calcium - DISSOLVED	128	0.20	mg/L	SW846 6010B
Iron - DISSOLVED	2.6	0.10	mg/L	SW846 6010B
Potassium - DISSOLVED	3.9	3.0	mg/L	SW846 6010B
Magnesium - DISSOLVED	35.5	0.20	mg/L	SW846 6010B
Manganese - DISSOLVED	2.6	0.010	mg/L	SW846 6010B
Sodium - DISSOLVED	90.6	5.0	mg/L	SW846 6010B
Iron	35.6	0.10	mg/L	SW846 6010B
Manganese	3.5	0.010	mg/L	SW846 6010B
1,1-Dichloroethane	10	4.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	120	4.0	ug/L	SW846 8260B
Tetrachloroethene	230	4.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	24	4.0	ug/L	SW846 8260B
Trichloroethene	90	4.0	ug/L	SW846 8260B
Total Dissolved Solids	910 G	50.0	mg/L	MCAWW 160.1
Chloride	115	2.5	mg/L	MCAWW 325.2
Total Organic Carbon	4.6	1.0	mg/L	MCAWW 415.1
Sulfate	68.0 Q	10.0	mg/L	MCAWW 415.1
Bicarbonate	481	5.0	mg/L	MCAWW 310.1
Alkalinity			··· J, —	
Total Alkalinity	481	5.0	mg/L	MCAWW 310.1

D1K130267

		REPORTIN	īG	ANALYTICAL
PARAMETER	RESULT	LIMIT	UNITS	METHOD
ar 52 11/11/01 12 05 000				
SK-5S 11/11/01 12:05 009				
Ammonia as N	0.24	0.10	mg/L	MCAWW 350.1
SK-5D 11/11/01 12:35 010				
Methane	1.2	0.50	ug/L	RSK SOP-175
Calcium - DISSOLVED	119	0.20	mg/L	SW846 6010B
Magnesium - DISSOLVED	49.0	0.20	mg/L	SW846 6010B
Manganese - DISSOLVED	0.42	0.010	mg/L	SW846 6010B
Sodium - DISSOLVED	45.7	5.0	mg/L	SW846 6010B
Iron	1.8	0.10	mg/L	SW846 6010B
Manganese	0.51	0.010	mg/L	SW846 6010B
cis-1,2-Dichloroethene	20	4.0	ug/L	SW846 8260B
Trichloroethene	120	4.0	ug/L	SW846 8260B
Total Dissolved	770	10.0	mg/L	MCAWW 160.1
Solids				
Chloride	74.4	2.5	mg/L	MCAWW 325.2
Nitrate-Nitrite	3.6	0.10	mg/L	MCAWW 353.2
Total Organic Carbon	18.9	1.0	mg/L	MCAWW 415.1
Sulfate	234 Q	50.0	mg/L	MCAWW 375.4
Bicarbonate	318	5.0	mg/L	MCAWW 310.1
Alkalinity			3.	
Total Alkalinity	318	5.0	mg/L	MCAWW 310.1
SK-6S 11/11/01 07:15 011				
Methane	73	0.50	ug/L	RSK SOP-175
Calcium - DISSOLVED	99.8	0.20	mg/L	SW846 6010B
Magnesium - DISSOLVED	36.3	0.20	mg/L	SW846 6010B
Manganese - DISSOLVED	2.7	0.010	mg/L	SW846 6010B
Sodium - DISSOLVED	82.2	5.0	mg/L	SW846 6010B
Iron	6.9	0.10	mg/L	SW846 6010B
Manganese	2.8	0.010	mg/L	SW846 6010B
1,1-Dichloroethane	2.8	1.0	ug/L	SW846 8260B
Tetrachloroethene	2.0	1.0	ug/L	SW846 8260B
Total Dissolved	1400 G	50.0	mg/L	MCAWW 160.1
Solids			5,	
Chloride	56.1	2.5	mg/L	MCAWW 325.2
Total Organic Carbon	2.9	1.0	mg/L	MCAWW 415.1
Sulfate	93.2 Q	10.0	mg/L	MCAWW 375.4
Bicarbonate	410	5.0	mg/L	MCAWW 310.1
Alkalinity	410	5.0	g / 11	MCANN SIU.I
Total Alkalinity	410	5.0	mg/L	MCAWW 310.1
TOTAL MINATITUTY	410	٠. ٥	1113 / TI	PICAWW SIU.I

D1K130267

	DIDIVERED		REPORTING		ANALYTICAL
	PARAMETER	RESULT	LIMIT	UNITS	METHOD
SK-10S	11/11/01 14:15 012				
	Ethane	2.2	0.50	ug/L	RSK SOP-175
	Methane	27	0.50	ug/L	RSK SOP-175
	Calcium - DISSOLVED	92.8	0.20	mg/L	SW846 6010B
	Potassium - DISSOLVED	3.0	3.0	mg/L	SW846 6010B
	Magnesium - DISSOLVED	41.3	0.20	mg/L	SW846 6010B
	Manganese - DISSOLVED	2.6	0.010	mg/L	SW846 6010B
	Sodium - DISSOLVED	75.2	5.0	mg/L	SW846 6010B
	Iron	259	0.10	mg/L	SW846 6010B
	Manganese	9.8	0.010	mg/L	SW846 6010B
	1,1-Dichloroethane	11	4.0	ug/L	SW846 8260B
	cis-1,2-Dichloroethene	110	4.0	ug/L	SW846 8260B
	Tetrachloroethene	56	4.0	ug/L	SW846 8260B
	Trichloroethene	9.7	4.0	ug/L	SW846 8260B
	Vinyl chloride	51	4.0	ug/L	SW846 8260B
	Total Dissolved	680 G	100	mg/L	MCAWW 160.1
	Solids				
	Chloride	80.5	2.5	mg/L	MCAWW 325.2
	Nitrate-Nitrite	0.35	0.10	mg/L	MCAWW 353.2
	Total Organic Carbon	4.6	1.0	mg/L	MCAWW 415.1
	Sulfate	142 Q	25.0	mg/L	MCAWW 375.4
	Bicarbonate	338	5.0	mg/L	MCAWW 310.1
	Alkalinity				
	Total Alkalinity	338	5.0	mg/L	MCAWW 310.1
•	Ammonia as N	0.39	0.10	mg/L	MCAWW 350.1
SK-25D	11/11/01 13:00 013				
_	Methane	0.98	0.50	ug/L	RSK SOP-175
	Calcium - DISSOLVED	163	0.20	mg/L	SW846 6010B
	Magnesium - DISSOLVED	63.9	0.20	mg/L	SW846 6010B
I	Manganese - DISSOLVED	0.055	0.010	mg/L	SW846 6010B
	Sodium - DISSOLVED	45.6	5.0	mg/L	SW846 6010B
	Iron	0.46	0.10	mg/L	SW846 6010B
	Manganese	0.067	0.010	mg/L	SW846 6010B
1	Total Dissolved Solids	994	10.0	mg/L	MCAWW 160.1
C	Chloride	50.9	2.5	mg/L	MCAWW 325.2
	Nitrate-Nitrite	1.7	0.10	mg/L	MCAWW 353.2
J	Total Organic Carbon	4.0	1.0	mg/L	MCAWW 415.1
٤	Sulfate	419 Q	50.0	mg/L	MCAWW 375.4
E	Bicarbonate	270	5.0	mg/L	MCAWW 310.1
	Alkalinity			-	· - -
ī	Cotal Alkalinity	270	5.0	mg/L	MCAWW 310.1

D1K130267

	PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SK-26S	3 11/11/01 13:30 014				
	Ethane	2.3	0.50	ug/L	RSK SOP-175
	Methane	27	0.50	ug/L	RSK SOP-175
	Calcium - DISSOLVED	94.8	0.20	mg/L	SW846 6010B
	Potassium - DISSOLVED	3.4	3.0	mg/L	SW846 6010B
	Magnesium - DISSOLVED	42.1	0.20	mg/L	SW846 6010B
	Manganese - DISSOLVED	2.7	0.010	mg/L	SW846 6010B
	Sodium - DISSOLVED	77.4	5.0	mg/L	SW846 6010B
	Iron	430	0.10	mg/L	SW846 6010B
	Manganese	12.2	0.010	mg/L	SW846 6010B
	1,1-Dichloroethane	14	4.0	ug/L	SW846 8260B
	cis-1,2-Dichloroethene	140	4.0	ug/L	SW846 8260B
	Tetrachloroethene	67	4.0	ug/L	SW846 8260B
	Trichloroethene	12	4.0	ug/L	SW846 8260B
	Vinyl chloride	59	4.0	ug/L	SW846 8260B
	Total Dissolved	840 G	100	mg/L	MCAWW 160.1
	Solids				
	Chloride	80.2	2.5	mg/L	MCAWW 325.2
	Nitrate-Nitrite	0.42	0.10	mg/L	MCAWW 353.2
	Total Organic Carbon	5.4	1.0	mg/L	MCAWW 415.1
	Sulfate	160 Q	25.0	mg/L	MCAWW 375.4
	Bicarbonate Alkalinity	332	5.0	mg/L	MCAWW 310.1
	Total Alkalinity	332	5.0	mg/L	MCAWW 310.1
	Ammonia as N	0.44	0.10	mg/L	MCAWW 350.1
SK-27S	11/11/01 14:00 015				
	Methane	9.9	0.50	ug/L	RSK SOP-175
	Calcium - DISSOLVED	102	0.20	mg/L	SW846 6010B
	Potassium - DISSOLVED	3.9	3.0	mg/L	SW846 6010B
	Magnesium - DISSOLVED	35.8	0.20	mg/L	SW846 6010B
	Manganese - DISSOLVED	0.94	0.010	mg/L	SW846 6010B
	Sodium - DISSOLVED	47.8	5.0	mg/L	SW846 6010B
	Iron	11.6	0.10	mg/L	SW846 6010B
	Manganese	1.0	0.010	mg/L	SW846 6010B
	cis-1,2-Dichloroethene	7.1	5.0	ug/L	SW846 8260B
	Ethylbenzene	32	5.0	ug/L	SW846 8260B
	n-Propylbenzene	6.2	5.0	ug/L	SW846 8260B
	Tetrachloroethene	9.2	5.0	ug/L	SW846 8260B
	Toluene	93		ug/L	SW846 8260B
	Trichloroethene	35		ug/L	SW846 8260B
	1,2,4-Trimethylbenzene	57		ug/L	SW846 8260B
	1,3,5-Trimethylbenzene	14		ug/L	SW846 8260B

D1K130267

O-Xylene	PARAMETEI	R	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-Xylene & p-Xylene 120	SK-27S 11/11/01	14:00 015				
M-Xylene & p-Xylene 120	o-Yvlene		4.4	5 O		CMOAC COCOD
Total Dissolved Solids Chloride 57.8 2.5 mg/L MCAWW 160.1 Solids Chloride 57.8 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 5.9 0.10 mg/L MCAWW 353.2 Total Organic Carbon 2.8 1.0 mg/L MCAWW 315.1 Sulfate 138 Q 25.0 mg/L MCAWW 315.1 Sulfate 138 Q 25.0 mg/L MCAWW 315.4 Bicarbonate 277 5.0 mg/L MCAWW 310.1 Alkalinity Total Alkalinity 277 5.0 mg/L MCAWW 310.1 SK-28S 11/11/01 14:30 018 Methane 620 E 0.50 ug/L RSK SOP-175 Calcium - DISSOLVED 132 0.20 mg/L SW846 6010B Iron - DISSOLVED 1.9 0.10 mg/L SW846 6010B Potassium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Magnesium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Manganese DISSOLVED 0.78 0.010 mg/L SW846 6010B Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Iron 17.6 0.10 mg/L SW846 8260B Sec-Butylbenzene 5.4 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Isopropylbenzene 2.7 1.0 ug/L SW846 8260B Isopropylbenzene 2.7 1.0 ug/L SW846 8260B Isopropylbenzene 2.7 1.0 ug/L SW846 8260B I-Propylbenzene 2.7 1.0 ug/L SW846 82		s n-Yulene			_	
Solids Chloride 57.8 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 5.9 0.10 mg/L MCAWW 325.2 Total Organic Carbon 2.8 1.0 mg/L MCAWW 353.2 Total Organic Carbon 2.8 1.0 mg/L MCAWW 353.2 Bicarbonate 138 Q 25.0 mg/L MCAWW 375.4 Bicarbonate 277 5.0 mg/L MCAWW 310.1 Alkalinity Total Alkalinity Total Alkalinity 277 5.0 mg/L MCAWW 310.1 SK-28S 11/11/01 14:30 018 Methane 620 E 0.50 ug/L RSK SOP-175 Methane 1900 D 25 ug/L RSK SOP-175 Calcium - DISSOLVED 132 0.20 mg/L SW846 6010B Iron - DISSOLVED 1.9 0.10 mg/L SW846 6010B Potassium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Magnesium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Magnesium - DISSOLVED 0.78 0.010 mg/L SW846 6010B Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 8260B Sec-Butylbenzene 5.4 1.0 ug/L SW846 8260B sec-Butylbenzene 1.9 1.0 ug/L SW846 8260B Sisopropylbenzene 1.9 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Isopropylbenzene 2.7 1.0 ug/L SW846 8260B Isopropylbenzene 2.7 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B	- ,	- -			_	
Nitrate-Nitrite 5.9 0.10 mg/L MCAWW 353.2 Total Organic Carbon 2.8 1.0 mg/L MCAWW 415.1 Sulfate 138 Q 25.0 mg/L MCAWW 375.4 Bicarbonate 277 5.0 mg/L MCAWW 310.1 Alkalinity Total Alkalinity 277 5.0 mg/L MCAWW 310.1 SK-28S 11/11/01 14:30 018 Methane 620 E 0.50 ug/L RSK SOP-175 Methane 1900 D 25 ug/L RSK SOP-175 Calcium - DISSOLVED 132 0.20 mg/L SW846 6010B Iron - DISSOLVED 1.9 0.10 mg/L SW846 6010B Potassium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Magnesium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Manganese - DISSOLVED 0.78 0.010 mg/L SW846 6010B Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Sodium - DISSOLVED 1.4 0.010 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 8260B Sec-Butylbenzene 2.4 1.0 ug/L SW846 8260B sec-Butylbenzene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 50.0 mg/L MCAWW 355.2		ssorved	000 G	20.0	шд/ п	MCAWW 160.1
Nitrate-Nitrite	Chloride		57.8	2.5	mg/L	MCAWW 325.2
Total Organic Carbon 2.8 1.0 mg/L MCAWW 415.1 Sulfate 138 Q 25.0 mg/L MCAWW 375.4 Bicarbonate 277 5.0 mg/L MCAWW 310.1 MCAWW 310.1 Total Alkalinity 277 5.0 mg/L MCAWW 310.1 MCAWW 310	Nitrate-N	Nitrite	5.9	0.10		MCAWW 353.2
Sulfate 138 Q 25.0 mg/L MCAWW 375.4 Bicarbonate 277 5.0 mg/L MCAWW 310.1 Alkalinity 7 7 7 7 7 7 7 7 Total Alkalinity 277 5.0 mg/L MCAWW 310.1 SK-28S 11/11/01 14:30 018	Total Org	ganic Carbon	2.8			
Bicarbonate	Sulfate	•	138 Q	25.0	_	
Total Alkalinity 277 5.0 mg/L MCAWW 310.1			277	5.0	-	
Methane 620 E 0.50 ug/L RSK SOP-175 Methane 1900 D 25 ug/L RSK SOP-175 Calcium - DISSOLVED 132 0.20 mg/L SW846 6010B Iron - DISSOLVED 1.9 0.10 mg/L SW846 6010B Potassium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Magnesium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Manganese - DISSOLVED 23.2 5.0 mg/L SW846 6010B Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B m-Butylbenzene 5.4 1.0 ug/L SW846 6010B sec-Butylbenzene 2.4 1.0 ug/L SW846 8260B sec-Butylbenzene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Isopropylbenzene 2.7 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2		_	0.55		<i>1</i> -	
Methane 620 E 0.50 ug/L RSK SOP-175 Methane 1900 D 25 ug/L RSK SOP-175 Calcium - DISSOLVED 132 0.20 mg/L SW846 6010B Iron - DISSOLVED 1.9 0.10 mg/L SW846 6010B Potassium - DISSOLVED 3.4 3.0 mg/L SW846 6010B Magnesium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Manganese - DISSOLVED 0.78 0.010 mg/L SW846 6010B Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B n-Butylbenzene 5.4 1.0 ug/L SW846 8260B sec-Butylbenzene 2.4 1.0 ug/L SW846 8260B cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B <	TOTAL AIR	talinity	277	5.0	mg/L	MCAWW 310.1
Methane 1900 D 25 ug/L RSK SOP-175 Calcium - DISSOLVED 132 0.20 mg/L SW846 6010B Iron - DISSOLVED 1.9 0.10 mg/L SW846 6010B Potassium - DISSOLVED 3.4 3.0 mg/L SW846 6010B Magnesium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Manganese - DISSOLVED 0.78 0.010 mg/L SW846 6010B Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B n-Butylbenzene 5.4 1.0 ug/L SW846 8260B n-Butylbenzene 2.4 1.0 ug/L SW846 8260B sec-Butylbenzene 1.5 1.0 ug/L SW846 8260B cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B	SK-28S 11/11/01	14:30 018				
Methane 1900 D 25 ug/L RSK SOP-175 Calcium - DISSOLVED 132 0.20 mg/L SW846 6010B Iron - DISSOLVED 1.9 0.10 mg/L SW846 6010B Potassium - DISSOLVED 3.4 3.0 mg/L SW846 6010B Magnesium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Manganese - DISSOLVED 23.2 5.0 mg/L SW846 6010B Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B n-Butylbenzene 5.4 1.0 ug/L SW846 8260B nec-Butylbenzene 2.4 1.0 ug/L SW846 8260B sec-Butylbenzene 1.5 1.0 ug/L SW846 8260B cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B	Methane		620 E	0.50	ua/L	RSK SOP-175
Calcium - DISSOLVED 132 0.20 mg/L SW846 6010B Iron - DISSOLVED 1.9 0.10 mg/L SW846 6010B Potassium - DISSOLVED 3.4 3.0 mg/L SW846 6010B Magnesium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Manganese - DISSOLVED 0.78 0.010 mg/L SW846 6010B Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 8260B Sec-Butylbenzene 5.4 1.0 ug/L SW846 8260B Sec-Butylbenzene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B Isopropylbenzene 2.7 1.0 ug/L SW846 8260B In-Propylbenzene 2.7 1.0 ug/L SW846 8260B	Methane				_	
Iron - DISSOLVED	Calcium -	DISSOLVED	132	-	_	
Potassium - DISSOLVED 3.4 3.0 mg/L SW846 6010B Magnesium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Manganese - DISSOLVED 0.78 0.010 mg/L SW846 6010B Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B n-Butylbenzene 5.4 1.0 ug/L SW846 8260B sec-Butylbenzene 2.4 1.0 ug/L SW846 8260B cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L <	Iron - DI	SSOLVED	1.9		_	
Magnesium - DISSOLVED 16.7 0.20 mg/L SW846 6010B Manganese - DISSOLVED 0.78 0.010 mg/L SW846 6010B Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B n-Butylbenzene 5.4 1.0 ug/L SW846 8260B sec-Butylbenzene 2.4 1.0 ug/L SW846 8260B cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2	Potassium	- DISSOLVED	3.4		_	
Manganese - DISSOLVED 0.78 0.010 mg/L SW846 6010B Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B n-Butylbenzene 5.4 1.0 ug/L SW846 8260B sec-Butylbenzene 2.4 1.0 ug/L SW846 8260B cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2	Magnesium	ı - DISSOLVED	16.7		_	
Sodium - DISSOLVED 23.2 5.0 mg/L SW846 6010B Iron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B n-Butylbenzene 5.4 1.0 ug/L SW846 8260B sec-Butylbenzene 2.4 1.0 ug/L SW846 8260B cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2				0.010	_	
Tron 77.6 0.10 mg/L SW846 6010B Manganese 1.4 0.010 mg/L SW846 6010B n-Butylbenzene 5.4 1.0 ug/L SW846 8260B sec-Butylbenzene 2.4 1.0 ug/L SW846 8260B cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2			23.2		-	
Manganese 1.4 0.010 mg/L SW846 6010B n-Butylbenzene 5.4 1.0 ug/L SW846 8260B sec-Butylbenzene 2.4 1.0 ug/L SW846 8260B cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2	Iron		77.6	0.10	_	
n-Butylbenzene 5.4 1.0 ug/L SW846 8260B sec-Butylbenzene 2.4 1.0 ug/L SW846 8260B cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2	Manganese		1.4	0.010	_	
sec-Butylbenzene 2.4 1.0 ug/L SW846 8260B cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2	n-Butylbe	nzene	5.4	1.0	_	
cis-1,2-Dichloroethene 1.5 1.0 ug/L SW846 8260B Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2	sec-Butyl	benzene	2.4	1.0	_	
Isopropylbenzene 1.9 1.0 ug/L SW846 8260B Naphthalene 5.9 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2	cis-1,2-D	ichloroethene	1.5	1.0	_	
Naphthalene 5.9 1.0 ug/L SW846 8260B n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2	Isopropyl	benzene	1.9	1.0	_	
n-Propylbenzene 2.7 1.0 ug/L SW846 8260B Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2	Naphthale	ne	5.9	1.0	_	
Total Dissolved 655 G 50.0 mg/L MCAWW 160.1 Solids Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2	n-Propylb	enzene	2.7	1.0	_	
Chloride 12.1 2.5 mg/L MCAWW 325.2 Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2		solved	655 G	50.0		
Nitrate-Nitrite 0.45 0.10 mg/L MCAWW 353.2			10 1	2 5	/*	NGN. 205 -
		itrito			_	
100al Organic Carbon 3.5 1.0 mg/L MCAWW 415.1					_	
		anic Carpon			_	
-1 - 2 25.0 mg/H MCAM 575.4		+ a			_	
Bicarbonate 263 5.0 mg/L MCAWW 310.1 Alkalinity			∠63	5.0	mg/L	MCAWW 310.1
Total Alkalinity 263 5.0 mg/L MCAWW 310.1		-	263	5.0	ma/T.	MCAWW 310 1
Ammonia as N 0.15 0.10 mg/L MCAWW 350.1		_				

METHODS SUMMARY

D1K130267

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Alkalinity	MCAWW 310.1	MCAWW 310.1
Bicarbonate Alkalinity	MCAWW 310.1	MCAWW 310.1
Carbonate Alkalinity	MCAWW 310.1	MCAWW 310.1
Chloride (Colorimetric, Automated Ferricyanide)	MCAWW 325.2	MCAWW 325.2
Dissolved Gases in Water	RSK SOP-175	EPA-9 RSK-175
Filterable Residue (TDS)	MCAWW 160.1	MCAWW 160.1
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3005A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Nitrate-Nitrite	MCAWW 353.2	MCAWW 353.2
Nitrogen, Ammonia	MCAWW 350.1	MCAWW 350.1
Sulfate	MCAWW 375.4	MCAWW 375.4
Total Organic Carbon	MCAWW 415.1	MCAWW 415.1
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

MCAWW	"Methods for Chemical Analysis of Water and Wastes", $EPA-600/4-79-020$, March 1983 and subsequent revisions.
RSK	Sample Prep and Calculations for Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibration Technique, RSKSOP-175, REV. 0, 8/11/94, USEPA Research Lab
SW846	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

D1K130267

ANALYTI	CAL		ANALYST
METHOD		ANALYST	ID
MCAWW 1	60.1	Lisa Finkle	. 003889
MCAWW 3	10.1	Ewa Kudla	001167
MCAWW 3	25.2	Maria Fayard	002596
MCAWW 3	50.1	Sara Agner	008534
MCAWW 3	53.2	Sara Agner	008534
MCAWW 3	75.4	Maria Fayard	002596
MCAWW 4	15.1	Dave Elkin	000901
RSK SOP	-175	William Jaycox	800012
SW846 6	010B	Steve Mustain	006720
SW846 8	260B	Mark McDaniel	000998
SW846 8	260B	Mike Armstrong	002544
Referen	ces:		
MCAWW		emical Analysis of Water and Wa 0, March 1983 and subsequent re	
RSK	in Water Sample:	Calculations for Dissolved Gas s Using a GC Headspace Equilibr OP-175, REV. 0, 8/11/94, USEPA	ation
SW846		or Evaluating Solid Waste, Phys. Edition, November 1986 and its	

SAMPLE SUMMARY

D1K130267

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
				
ENV29	001	SK-1S	11/11/01	08:15
ENV3E	002	SK-1D	11/11/01	07:45
ENV3F	003	SK-2S	11/11/01	11:00
ENV3G	004	K-2D	11/11/01	
ENV3H	005	SK-3S	11/11/01	
ENV3L	006	SK-3D	11/11/01	
ENV3M		SK-4S	11/11/01	
ENV3N	008	SK-4D	11/11/01	
ENV3P	009	SK-5S	11/11/01	
ENV3V	010	SK-5D	11/11/01	
ENV3W	011	K-6S	11/11/01	
ENV3X	012	K-10S	11/11/01	
ENV31	013	SK-25D	11/11/01	
ENV34	013	K-26S	11/11/01	
	014		11/11/01	
ENV37		SK-27S		14:00
ENV39	016	B-04	11/11/01	
ENV4C	017	B-05	11/11/01	
ENV4G	018	K-28S	11/11/01	14:30

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.

NOTE(S):

- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Client Sample ID: SK-1S

GC/MS Volatiles

Lot-Sample #...: D1K130267-001 Work Order #...: ENV291AA Matrix..... WATER

 Date Sampled...:
 11/11/01 08:15
 Date Received...:
 11/13/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324409
 Analysis Time...:
 12:34

Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER			REPORTI	NG
Bromobenzene	PARAMETER	RESULT	LIMIT	UNITS
Bromochloromethane	Benzene	ND	1.0	ug/L
Bromodichloromethane	Bromobenzene	ND	1.0	
Bromodichloromethane ND	Bromochloromethane	ND	1.0	ug/L
Bromoform ND	Bromodichloromethane	ND	1.0	- '
ND	Bromoform	ND	1.0	- -
n-Butylbenzene ND 1.0 ug/L sec-Butylbenzene ND 1.0 ug/L tert-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chloroform ND 1.0 ug/L Chlorotoluene ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloroptopane ND	Bromomethane	ND	2.0	ug/L
sec-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chlorotethane ND 2.0 ug/L Chlorofform ND 1.0 ug/L Chlorotethane ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND </td <td>n-Butylbenzene</td> <td>ND</td> <td>1.0</td> <td>ug/L</td>	n-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chlorosethane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chlorotoluene ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 1,2-Dichlorotoluene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND	sec-Butylbenzene	ND	1.0	ug/L
Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chloroethane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 2.0 ug/L Chloromethane ND 1.0 ug/L Chloromethane ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L cis-1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L	tert-Butylbenzene	ND	1.0	=
Chlorodibromomethane ND 1.0 ug/L Chloroethane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 2.0 ug/L Chloromethane ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 1.1 ug/L Dibromomethane ND 1.0 ug/L 1.2-Dichlorobenzene ND 1.0 ug/L 1.3-Dichlorobenzene ND 1.0 ug/L 1.4-Dichlorobenzene ND 1.0 ug/L 1.1-Dichloromethane ND 2.0 ug/L 1.1-Dichloroethane ND 1.0 ug/L 1.1-Dichloroethane ND 1.0 ug/L 1.2-Dichloroethane ND 1.0 ug/L 1.2-Dichloroethene ND 1.0 ug/L 1.2-Dichloroethene ND 1.0 ug/L 1.1-Dichloroethene ND 1.0 ug/L 1.1-Dichloropropane ND 1.0 ug/L 1.2-Dichloropropane ND 1.0 ug/L 1.3-Dichloropropane ND 1.0 ug/L 1.3-Dichloropropane ND 1.0 ug/L 1.3-Dichloropropane ND 1.0 ug/L 1.3-Dichloropropane ND 1.0 ug/L 1.1-Dichloropropane ND 1.0 ug/L	Carbon tetrachloride	ND	1.0	ug/L
Chloroethane	Chlorobenzene	ND	1.0	ug/L
Chloroform ND 1.0 ug/L Chloromethane ND 2.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L	Chlorodibromomethane	ND	1.0	ug/L
Chloromethane ND 2.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,1-Dichloroptopane ND 1.0 ug/L 1,2-Dichloroptopane ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L	Chloroethane	ND	2.0	ug/L
2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichlorobenzene ND 1.0 ug/L 1,1-Dichlorobethane ND 1.0 ug/L 1,2-Dichlorobethane ND 1.0 ug/L 1,1-Dichlorobethene ND 1.0 ug/L 1,1-Dichlorobethene ND 0.50 ug/L trans-1,2-Dichlorobethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichloroflu	Chloroform	ND	1.0	ug/L
4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane	Chloromethane	ND	2.0	ug/L
Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L Eth	2-Chlorotoluene	ND	1.0	ug/L
1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 0.50 ug/L 1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloroprop	4-Chlorotoluene	ND	1.0	ug/L
1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloroprop	Dibromomethane	ND	1.0	ug/L
1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 0.50 ug/L cis-1,2-Dichloroethene ND 0.50 ug/L trans-1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Methylene chl	1,2-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L cis-1,2-Dichloroethene ND 0.50 ug/L trans-1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L	1,3-Dichlorobenzene	ND	1.0	ug/L
1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L cis-1,2-Dichloroethene ND 0.50 ug/L trans-1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	1,4-Dichlorobenzene	ND	1.0	ug/L
1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L cis-1,2-Dichloroethene 3.3 1.0 ug/L trans-1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethene ND 1.0 ug/L cis-1,2-Dichloroethene ND 0.50 ug/L trans-1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L P-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	1,1-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene3.31.0ug/Ltrans-1,2-DichloroetheneND0.50ug/L1,2-DichloropropaneND1.0ug/L1,3-DichloropropaneND1.0ug/L2,2-DichloropropaneND5.0ug/L1,1-DichloropropeneND1.0ug/LEthylbenzeneND1.0ug/LTrichlorofluoromethaneND2.0ug/LHexachlorobutadieneND1.0ug/LIsopropylbenzeneND1.0ug/Lp-IsopropyltolueneND1.0ug/LMethylene chlorideND1.0ug/L	1,2-Dichloroethane	ND	1.0	ug/L
trans-1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Isopropyltoluene ND 1.0 ug/L P-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	1,1-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L P-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		3.3	1.0	ug/L
1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		ND	0.50	ug/L
2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	1,2-Dichloropropane	ND	1.0	ug/L
1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		ND	1.0	ug/L
Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	2,2-Dichloropropane	ND	5.0	ug/L
Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	_ _ _	ND	1.0	ug/L
Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	-	ND	1.0	ug/L
Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	Trichlorofluoromethane	ND	2.0	ug/L
p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		ND	1.0	ug/L
Methylene chloride ND 1.0 ug/L		ND	1.0	ug/L
		ND	1.0	ug/L
Naphthalene ND 1.0 ug/L	_	ND	1.0	ug/L
	Naphthalene	ND	1.0	ug/L

Client Sample ID: SK-1S

GC/MS Volatiles

Lot-Sample #: D1K130267-001	Work Order	#: ENV291AA	Matrix:	WATER
-----------------------------	------------	-------------	---------	-------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	24	1.0	ug/L
Toluene	ND	1.0	${ t ug/L}$
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	2.1	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	102	(80 - 120)	
1,2-Dichloroethane-d4	97	(72 - 127)	
4-Bromofluorobenzene	97	(79 - 119)	
Toluene-d8	111	(79 - 119)	

Client Sample ID: SK-1D

GC/MS Volatiles

Lot-Sample #...: D1K130267-002 Work Order #...: ENV3E1AC Matrix...... WATER

Date Sampled...: 11/11/01 07:45 Date Received..: 11/13/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324409 Analysis Time..: 13:53

Dilution Factor: 1

Method....: SW846 8260B

REPORTING

		KEL OKT I	.10	
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	1.0	ug/L	
Bromobenzene	ND	1.0	ug/L	
Bromochloromethane	ND	1.0	ug/L	
Bromodichloromethane	ND	1.0	ug/L	
Bromoform	ND	1.0	ug/L	
Bromomethane	ND	2.0	ug/L	
n-Butylbenzene	ND	1.0	ug/L	
sec-Butylbenzene	ND	1.0	ug/L	
tert-Butylbenzene	ND	1.0	ug/L	
Carbon tetrachloride	ND	1.0	ug/L	
Chlorobenzene	ND	1.0	ug/L	
Chlorodibromomethane	ND	1.0	ug/L	
Chloroethane	ND	2.0	ug/L	
Chloroform	ND	1.0	ug/L	
Chloromethane	ND	2.0	ug/L	
2-Chlorotoluene	ND	1.0	ug/L	
4-Chlorotoluene	ND	1.0	ug/L	
Dibromomethane	ND	1.0	ug/L	
1,2-Dichlorobenzene	ND	1.0	ug/L	
1,3-Dichlorobenzene	ND	1.0	ug/L	
1,4-Dichlorobenzene	ND	1.0	ug/L	
Dichlorodifluoromethane	ND	2.0	ug/L	
1,1-Dichloroethane	ND	1.0	ug/L	
1,2-Dichloroethane	ND	1.0	ug/L	
1,1-Dichloroethene	ND	1.0	ug/L	
cis-1,2-Dichloroethene	ND	1.0	ug/L	
trans-1,2-Dichloroethene	ND	0.50	ug/L	
1,2-Dichloropropane	ND	1.0	ug/L	
1,3-Dichloropropane	ND	1.0	ug/L	
2,2-Dichloropropane	ND	5.0	ug/L	
1,1-Dichloropropene	ND	1.0	ug/L	
Ethylbenzene	ND	1.0	ug/L	
Trichlorofluoromethane	ND	2.0	ug/L	
Hexachlorobutadiene	ND	1.0	ug/L	
Isopropylbenzene	ND	1.0	ug/L	
p-Isopropyltoluene	ND	1.0	ug/L	
Methylene chloride	ND	1.0	ug/L	
Naphthalene	ND	1.0	ug/L	

Client Sample ID: SK-1D

GC/MS Volatiles

Lot-Sample #...: D1K130267-002 Work Order #...: ENV3E1AC Matrix..... WATER

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	DEGOLERAL	
CIDDOCATE		RECOVERY	
SURROGATE Dibromofluoromethane	RECOVERY	LIMITS	
1,2-Dichloroethane-d4	111	(80 - 120)	
4-Bromofluorobenzene	111 102	(72 - 127)	
Toluene-d8		(79 - 119)	
TOTUETIE-U8	107	(79 - 119)	

Client Sample ID: SK-2S

GC/MS Volatiles

Lot-Sample #...: D1K130267-003 Work Order #...: ENV3F1AC Matrix..... WATER

 Date Sampled...:
 11/11/01 11:00 Date Received..:
 11/13/01

 Prep Date....:
 11/19/01 Analysis Date..:
 11/19/01

 Prep Batch #...:
 1324409 Analysis Time..:
 14:19

Dilution Factor: 8

Method.....: SW846 8260B

		REPORTIN	īG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	8.0	ug/L
Bromobenzene	ND	8.0	ug/L
Bromochloromethane	, ND	8.0	ug/L
Bromodichloromethane	ND	8.0	ug/L
Bromoform	ND	8.0	ug/L
Bromomethane	ND	16	ug/L
n-Butylbenzene	ND	8.0	ug/L
sec-Butylbenzene	ND	8.0	ug/L
tert-Butylbenzene	ND	8.0	ug/L
Carbon tetrachloride	ND	8.0	ug/L
Chlorobenzene	ND	8.0	ug/L
Chlorodibromomethane	ND	8.0	ug/L
Chloroethane	ND	16	ug/L
Chloroform	ND	8.0	ug/L
Chloromethane	ND	16	ug/L
2-Chlorotoluene	ND	8.0	ug/L
4-Chlorotoluene	ND	8.0	ug/L
Dibromomethane	ND	8.0	ug/L
1,2-Dichlorobenzene	ND	8.0	ug/L
1,3-Dichlorobenzene	ND	8.0	ug/L
1,4-Dichlorobenzene	ND	8.0	ug/L
Dichlorodifluoromethane	ND	16	ug/L
1,1-Dichloroethane	17	8.0	ug/L
1,2-Dichloroethane	ND	8.0	ug/L
1,1-Dichloroethene	ND	8.0	ug/L
cis-1,2-Dichloroethene	260	8.0	ug/L
trans-1,2-Dichloroethene	ND	4.0	ug/L
1,2-Dichloropropane	ND	8.0	ug/L
1,3-Dichloropropane	ND	8.0	ug/L
2,2-Dichloropropane	ND	40	ug/L
1,1-Dichloropropene	ND	8.0	ug/L
Ethylbenzene	ND	8.0	ug/L
Trichlorofluoromethane	ND	16	ug/L
Hexachlorobutadiene	ND	8.0	ug/L
Isopropylbenzene	ND	8.0	ug/L
p-Isopropyltoluene	ND	8.0	ug/L
Methylene chloride	ND	8.0	ug/L
Naphthalene	ND	8.0	ug/L

Client Sample ID: SK-2S

GC/MS Volatiles

Lot-Sample #: D1K130267-003	Work Order #	ENV3F1AC	Matrix:	WATER
-----------------------------	--------------	----------	---------	-------

		REPORTIN	'G	
PARAMETER	RESULT	LIMIT	UNITS	
n-Propylbenzene	ND	8.0	ug/L	
Styrene	ND	8.0	ug/L	*
1,1,1,2-Tetrachloroethane	ND	8.0	ug/L	
1,1,2,2-Tetrachloroethane	ND	8.0	ug/L	
Tetrachloroethene	180	8.0	ug/L	
Toluene	ND	8.0	ug/L	•
1,2,3-Trichlorobenzene	ND	8.0	ug/L	
1,2,4-Trichloro-	ND	8.0	ug/L	
benzene				
1,1,1-Trichloroethane	38	8.0	ug/L	
1,1,2-Trichloroethane	ND	8.0	ug/L	
Trichloroethene	100	8.0	ug/L	
1,2,3-Trichloropropane	ND	8.0	ug/L	
1,2,4-Trimethylbenzene	ND	8.0	ug/L	
1,3,5-Trimethylbenzene	ND	8.0	ug/L	
Vinyl chloride	ND	8.0	ug/L	
o-Xylene	ND	8.0	ug/L	
m-Xylene & p-Xylene	ND .	16	ug/L	
1,2-Dibromo-3-	ND	16	ug/L	
chloropropane (DBCP)				
1,2-Dibromoethane (EDB)	ND	8.0	ug/L	
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	108	(80 - 12	0)	
1,2-Dichloroethane-d4	110	(72 - 12	•	
4-Bromofluorobenzene	101	(79 - 11	9)	
Toluene-d8	108	(79 - 11	9)	

Client Sample ID: SK-2D

GC/MS Volatiles

Lot-Sample #...: D1K130267-004 Work Order #...: ENV3G1AC Matrix..... WATER

Date Sampled...: 11/11/01 11:30 Date Received..: 11/13/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324409 Analysis Time..: 14:44

Dilution Factor: 4

Method.....: SW846 8260B

		REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	4.0	ug/L
Bromobenzene	ND	4.0	ug/L
Bromochloromethane	ND	4.0	ug/L
Bromodichloromethane	ND	4.0	ug/L
Bromoform	ND	4.0	ug/L
Bromomethane	ND	8.0	ug/L
n-Butylbenzene	ND	4.0	ug/L
sec-Butylbenzene	ND	4.0	ug/L
tert-Butylbenzene	ND	4.0	ug/L
Carbon tetrachloride	ND	4.0	ug/L
Chlorobenzene	ND	4.0	ug/L
Chlorodibromomethane	ND	4.0	ug/L
Chloroethane	ND	8.0	ug/L
Chloroform	ND	4.0	ug/L
Chloromethane	ND	8.0	ug/L
2-Chlorotoluene	ND	4.0	ug/L
4-Chlorotoluene	ND	4.0	ug/L
Dibromomethane	ND	4.0	ug/L
1,2-Dichlorobenzene	ND	4.0	ug/L
1,3-Dichlorobenzene	ND	4.0	ug/L
1,4-Dichlorobenzene	ND	4.0	ug/L
Dichlorodifluoromethane	ND	8.0	ug/L
1,1-Dichloroethane	ND	4.0	ug/L
1,2-Dichloroethane	ND	4.0	ug/L
1,1-Dichloroethene	ND	4.0	ug/L
cis-1,2-Dichloroethene	39	4.0	ug/L
trans-1,2-Dichloroethene	ND	2.0	ug/L
1,2-Dichloropropane	ND	4.0	ug/L
1,3-Dichloropropane	ND	4.0	ug/L
2,2-Dichloropropane	ND	20	ug/L
1,1-Dichloropropene	ND	4.0	ug/L
Ethylbenzene	ND	4.0	ug/L
Trichlorofluoromethane	ND	8.0	ug/L
Hexachlorobutadiene	ND	4.0	ug/L
Isopropylbenzene	ND	4.0	ug/L
p-Isopropyltoluene	ND	4.0	ug/L
Methylene chloride	ND	4.0	ug/L
Naphthalene	ND	4.0	ug/L

Client Sample ID: SK-2D

GC/MS Volatiles

Lot-Sample #: D1K130267-004 1	Work Order #: ENV3G1AC	Matrix WATER
-------------------------------	------------------------	--------------

		REPORTING	
PARAMETER	RESULT	<u>LIMIT</u>	UNITS
n-Propylbenzene	ND	4.0	ug/L
Styrene	ND	4.0	ug/L
1,1,1,2-Tetrachloroethane	ND	4.0	ug/L
1,1,2,2-Tetrachloroethane	ND	4.0	ug/L
Tetrachloroethene	ND	4.0	ug/L
Toluene	ND	4.0	ug/L
1,2,3-Trichlorobenzene	ND	4.0	ug/L
1,2,4-Trichloro-	ND .	4.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	4.0	ug/L
1,1,2-Trichloroethane	ND	4.0	ug/L
Trichloroethene	210	4.0	ug/L
1,2,3-Trichloropropane	ND	4.0	ug/L
1,2,4-Trimethylbenzene	ND	4.0	ug/L
1,3,5-Trimethylbenzene	ND	4.0	ug/L
Vinyl chloride	ND	4.0	ug/L
o-Xylene	ND	4.0	ug/L
m-Xylene & p-Xylene	ND	8.0	ug/L
1,2-Dibromo-3-	ND	8.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	4.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	107	(80 - 120)	
1,2-Dichloroethane-d4	105	(72 - 127)	
4-Bromofluorobenzene	99	(79 - 119)	
Toluene-d8	107	(79 - 119)	

Client Sample ID: SK-3S

GC/MS Volatiles

Lot-Sample #...: D1K130267-005 Work Order #...: ENV3H1AC Matrix...... WATER

Date Sampled...: 11/11/01 10:05 Date Received...: 11/13/01 Prep Date.....: 11/19/01 Analysis Date...: 15:10

Dilution Factor: 2

Method..... SW846 8260B

		REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	2.0	ug/L
Bromobenzene	ND	2.0	ug/L
Bromochloromethane	ND	2.0	ug/L
Bromodichloromethane	ND	2.0	ug/L
Bromoform	ND	2.0	ug/L
Bromomethane	ND	4.0	ug/L
n-Butylbenzene	ND	2.0	ug/L
sec-Butylbenzene	ND	2.0	ug/L
tert-Butylbenzene	ND	2.0	ug/L
Carbon tetrachloride	ND	2.0	ug/L
Chlorobenzene	ND	2.0	ug/L
Chlorodibromomethane	· ND	2.0	ug/L
Chloroethane	ND	4.0	ug/L
Chloroform	ND	2.0	ug/L
Chloromethane	ND	4.0	ug/L
2-Chlorotoluene	ND	2.0	ug/L
4-Chlorotoluene	ND	2.0	ug/L
Dibromomethane	ND	2.0	ug/L
1,2-Dichlorobenzene	ND	2.0	ug/L
1,3-Dichlorobenzene	ND	2.0	ug/L
1,4-Dichlorobenzene	ND	2.0	ug/L
Dichlorodifluoromethane	ND	4.0	ug/L
1,1-Dichloroethane	ND	2.0	ug/L
1,2-Dichloroethane	ND	2.0	ug/L
1,1-Dichloroethene	ND	2.0	ug/L
cis-1,2-Dichloroethene	6.7	2.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	2.0	ug/L
1,3-Dichloropropane	ND	2.0	ug/L
2,2-Dichloropropane	ND	10	ug/L
1,1-Dichloropropene	ND	2.0	ug/L
Ethylbenzene	33	2.0	ug/L
Trichlorofluoromethane	ND	4.0	ug/L
Hexachlorobutadiene	ND	2.0	ug/L
Isopropylbenzene	2.1	2.0	ug/L
p-Isopropyltoluene	ND	2.0	ug/L
Methylene chloride	ND	2.0	ug/L
Naphthalene	3.8	2.0	ug/L
			-5/

Client Sample ID: SK-3S

GC/MS Volatiles

Lot-Sample #: D1K130267-005	Work Order	#: ENV3H1AC	Matrix:	WATER
-----------------------------	------------	-------------	---------	-------

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
n-Propylbenzene	6.7	2.0	ug/L	
Styrene	ND .	2.0	ug/L	
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	
Tetrachloroethene	8.0	2.0	ug/L	
Toluene	87	2.0	ug/L	
1,2,3-Trichlorobenzene	ND	2.0	ug/L	
1,2,4-Trichloro-	ND	2.0	ug/L	
benzene				
1,1,1-Trichloroethane	ND	2.0	ug/L	
1,1,2-Trichloroethane	ND	2.0	ug/L	
Trichloroethene	35	2.0	ug/L	
1,2,3-Trichloropropane	ND	2.0	ug/L	
1,2,4-Trimethylbenzene	55	2.0	ug/L	
1,3,5-Trimethylbenzene	13	2.0	ug/L	
Vinyl chloride	ND	2.0	ug/L	
o-Xylene	44	2.0	ug/L	
m-Xylene & p-Xylene	120	4.0	ug/L	
1,2-Dibromo-3-	ND	4.0	ug/L	
chloropropane (DBCP)				
1,2-Dibromoethane (EDB)	ND	2.0	ug/L	
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	105	(80 - 120)		
1,2-Dichloroethane-d4	104	(72 - 127)		
4-Bromofluorobenzene	96	(79 - 119)		
Toluene-d8	103	(79 - 119)		

Client Sample ID: SK-3D

GC/MS Volatiles

Lot-Sample #...: D1K130267-006 Work Order #...: ENV3L1AC Matrix...... WATER

 Date Sampled...:
 11/11/01 10:35
 Date Received...:
 11/13/01

 Prep Date.....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325275
 Analysis Time...:
 13:12

Dilution Factor: 2

Method.....: SW846 8260B

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	2.0	ug/L	
Bromobenzene	ND	2.0	ug/L	
Bromochloromethane	ND	2.0	ug/L	
Bromodichloromethane	ND	2.0	ug/L	
Bromoform	ND	2.0	ug/L	
Bromomethane	ND	4.0	ug/L	
n-Butylbenzene	ND	2.0	ug/L	
sec-Butylbenzene	ND	2.0	ug/L	
tert-Butylbenzene	ND	2.0	ug/L	
Carbon tetrachloride	ND	2.0	ug/L	
Chlorobenzene	ND	2.0	ug/L	
Chlorodibromomethane	ND	2.0	ug/L	
Chloroethane	ND	4.0	ug/L	
Chloroform	ND	2.0	ug/L	
Chloromethane	ND .	4.0	ug/L	
2-Chlorotoluene	ND	2.0	ug/L	
4-Chlorotoluene	ND	2.0	ug/L	
Dibromomethane	ND	2.0	ug/L	
1,2-Dichlorobenzene	ND	2.0	ug/L	
1,3-Dichlorobenzene	ND	2.0	ug/L	
1,4-Dichlorobenzene	ND	2.0	ug/L	
Dichlorodifluoromethane	ND	4.0	ug/L	
1,1-Dichloroethane	ND	2.0	ug/L	
1,2-Dichloroethane	ND	2.0	ug/L	
1,1-Dichloroethene	ND	2.0	ug/L	
cis-1,2-Dichloroethene	11	2.0	ug/L	
trans-1,2-Dichloroethene	ND	1.0	ug/L	
1,2-Dichloropropane	ND	2.0	ug/L	
1,3-Dichloropropane	ND	2.0	ug/L	
2,2-Dichloropropane	ND	10	ug/L	
1,1-Dichloropropene	ND	2.0	ug/L	
Ethylbenzene	ND	2.0	ug/L	
Trichlorofluoromethane	ND	4.0	ug/L	
Hexachlorobutadiene	ND	2.0	ug/L	
Isopropylbenzene	ND	2.0	ug/L	
p-Isopropyltoluene	ND	2.0	ug/L	
Methylene chloride	ND	2.0	ug/L	
Naphthalene	ND	2.0	ug/L	
			٠.	

Client Sample ID: SK-3D

GC/MS Volatiles

Lot-Sample #...: D1K130267-006 Work Order #...: ENV3L1AC Matrix...... WATER

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	2.0	ug/L
Styrene	ND	2.0	ug/L
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L
Tetrachloroethene	ND	2.0	ug/L
Toluene	ND	2.0	ug/L
1,2,3-Trichlorobenzene	ND	2.0	ug/L
1,2,4-Trichloro-	ND	2.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	2.0	ug/L
1,1,2-Trichloroethane	ND	2.0	ug/L
Trichloroethene	69	2.0	ug/L
1,2,3-Trichloropropane	ND	.2.0	ug/L
1,2,4-Trimethylbenzene	ND	2.0	ug/L
1,3,5-Trimethylbenzene	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
o-Xylene	ND	2.0	ug/L
m-Xylene & p-Xylene	ND	4.0	ug/L
1,2-Dibromo-3-	ND	4.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	2.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	_
Dibromofluoromethane	107	(80 - 120)	
1,2-Dichloroethane-d4	110	(72 - 127)	
4-Bromofluorobenzene	94	(79 - 119)	
Toluene-d8	114	(79 - 119)	

Client Sample ID: SK-4S

GC/MS Volatiles

Lot-Sample #...: D1K130267-007 Work Order #...: ENV3M1AC Matrix...... WATER

 Date Sampled...:
 11/11/01 09:40
 Date Received...:
 11/13/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324409
 Analysis Time...:
 16:03

Dilution Factor: 2

Method.....: SW846 8260B

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	2.0	ug/L	
Bromobenzene	ND	2.0	ug/L	
Bromochloromethane	ND	2.0	ug/L	
Bromodichloromethane	ND	2.0	ug/L	
Bromoform	ND	2.0	ug/L	
Bromomethane	ND	4.0	ug/L	
n-Butylbenzene	ND	2.0	ug/L	
sec-Butylbenzene	ND	2.0	ug/L	
tert-Butylbenzene	ND	2.0	ug/L	
Carbon tetrachloride	ND	2.0	ug/L	
Chlorobenzene	ND	2.0	ug/L	
Chlorodibromomethane	ND	2.0	ug/L	
Chloroethane	ND	4.0	ug/L	
Chloroform	ND	2.0	ug/L	
Chloromethane	ND	4.0	ug/L	
2-Chlorotoluene	ND	2.0	ug/L	
4-Chlorotoluene	ND	2.0	ug/L	
Dibromomethane	ND	2.0	ug/L	
1,2-Dichlorobenzene	ND	2.0	ug/L	
1,3-Dichlorobenzene	ND	2.0	ug/L	
1,4-Dichlorobenzene	ND	2.0	ug/L	
Dichlorodifluoromethane	ND	4.0	ug/L	
1,1-Dichloroethane	7.8	2.0	ug/L	
1,2-Dichloroethane	ND	2.0	ug/L	
1,1-Dichloroethene	3.6	2.0	ug/L	
cis-1,2-Dichloroethene	45	2.0	ug/L	
trans-1,2-Dichloroethene	ND	1.0	ug/L	
1,2-Dichloropropane	ND	2.0	ug/L	
1,3-Dichloropropane	ND	2.0	ug/L	
2,2-Dichloropropane	ND	10	ug/L	
1,1-Dichloropropene	ND	2.0	ug/L	
Ethylbenzene	ND	2.0	ug/L	
Trichlorofluoromethane	ND	4.0	ug/L	
Hexachlorobutadiene	ND	2.0	ug/L	
Isopropylbenzene	ND	2.0	ug/L	
p-Isopropyltoluene	ND	2.0	ug/L	
Methylene chloride	ND	2.0	ug/L	
Naphthalene	ND	2.0	ug/L	

Client Sample ID: SK-4S

Lot-Sample #: D1K130267-007	Work Order #: ENV3M1AC	Matrix: WATER
-----------------------------	------------------------	---------------

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	2.0	ug/L
Styrene	ND	2.0	ug/L
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L
Tetrachloroethene	76	2.0	ug/L
Toluene	ND	2.0	ug/L
1,2,3-Trichlorobenzene	ND	2.0	ug/L
1,2,4-Trichloro-	ND	2.0	ug/L
benzene			
1,1,1-Trichloroethane	11	2.0	ug/L
1,1,2-Trichloroethane	ND	2.0	ug/L
Trichloroethene	12	2.0	ug/L
1,2,3-Trichloropropane	ND	2.0	\mathtt{ug}/\mathtt{L}
1,2,4-Trimethylbenzene	ND	2.0	ug/L
1,3,5-Trimethylbenzene	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
o-Xylene	ND	2.0	ug/L
m-Xylene & p-Xylene	ND	4.0	ug/L
1,2-Dibromo-3-	ND	4.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	2.0	ug/L
	DEDOENE	DECOVERY	
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	<u></u>
Dibromofluoromethane	106	(80 - 12	
1,2-Dichloroethane-d4	106	(72 - 12	
4-Bromofluorobenzene	96	(79 - 11	-
Toluene-d8	106	(79 - 11	9)

Client Sample ID: SK-4D

GC/MS Volatiles

Lot-Sample #...: D1K130267-008 Work Order #...: ENV3N1AC Matrix...... WATER

Date Sampled...: 11/11/01 15:15 Date Received..: 11/13/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 13:39

Dilution Factor: 2

Method....: SW846 8260B

		REPORTIN	īG	
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	2.0	ug/L	
Bromobenzene	·· ND	2.0	ug/L	
Bromochloromethane	ND	2.0	ug/L	
Bromodichloromethane	ND	2.0	ug/L	
Bromoform	ND	2.0	ug/L	
Bromomethane	ND	4.0	ug/L	
n-Butylbenzene	ND	2.0	ug/L	
sec-Butylbenzene	ND	2.0	ug/L	
tert-Butylbenzene	ND	2.0	ug/L	
Carbon tetrachloride	ND	2.0	ug/L	
Chlorobenzene	ND	2.0	ug/L	
Chlorodibromomethane	ND	2.0	ug/L	
Chloroethane	ND	4.0	ug/L	
Chloroform	ND	2.0	ug/L	
Chloromethane	ND	4.0	ug/L	
2-Chlorotoluene	ND	2.0	ug/L	
4-Chlorotoluene	ND	2.0	ug/L	
Dibromomethane	ND	2.0	ug/L	
1,2-Dichlorobenzene	ND	2.0	ug/L	
1,3-Dichlorobenzene	ND	2.0	ug/L	
1,4-Dichlorobenzene	ND	2.0	ug/L	
Dichlorodifluoromethane	ND	4.0	ug/L	
1,1-Dichloroethane	ND	2.0	ug/L	
1,2-Dichloroethane	ND	2.0	ug/L	-
1,1-Dichloroethene	ND	2.0	ug/L	
cis-1,2-Dichloroethene	11	2.0	ug/L	
trans-1,2-Dichloroethene	ND	1.0	ug/L	
1,2-Dichloropropane	ND	2.0	ug/L	
1,3-Dichloropropane	ND	2.0	ug/L	
2,2-Dichloropropane	ND	10	ug/L	
1,1-Dichloropropene	ND	2.0	ug/L	
Ethylbenzene	ND	2.0	ug/L	
Trichlorofluoromethane	ND	4.0	ug/L	
Hexachlorobutadiene	ND	2.0	ug/L	
Isopropylbenzene	ND	2.0	ug/L	
p-Isopropyltoluene	ND	2.0	ug/L	
Methylene chloride	ND	2.0	ug/L	
Naphthalene	ND	2.0	ug/L	

Client Sample ID: SK-4D

Lot-Sample	#:	D1K130267-008	Work (Order	#:	ENV3N1AC	Matrix	.: WATER
------------	----	---------------	--------	-------	----	----------	--------	----------

		REPORTING	}
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	2.0	ug/L
Styrene	ND	2.0	ug/L
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L
Tetrachloroethene	3.5	2.0	ug/L
Toluene	ND	2.0	ug/L
1,2,3-Trichlorobenzene	ND	2.0	ug/L
1,2,4-Trichloro-	ND	2.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	2.0	ug/L
1,1,2-Trichloroethane	ND	2.0	ug/L
Trichloroethene	63	2.0	ug/L
1,2,3-Trichloropropane	ND	2.0	ug/L
1,2,4-Trimethylbenzene	ND	2.0	ug/L
1,3,5-Trimethylbenzene	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
o-Xylene	ND	2.0	ug/L
m-Xylene & p-Xylene	ND	4.0	ug/L
1,2-Dibromo-3-	ND	4.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	2.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	107	(80 - 120	.
1,2-Dichloroethane-d4	114	(72 - 127)	•
4-Bromofluorobenzene	102	(72 - 127)	•
Toluene-d8	115	(79 - 119	•
TOTACILE AU	11 <i>3</i>	(/) - 119	į

Client Sample ID: SK-5S

GC/MS Volatiles

Lot-Sample #...: D1K130267-009 Work Order #...: ENV3P1AC Matrix.....: WATER

 Date Sampled...:
 11/11/01 12:05
 Date Received...:
 11/13/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324409
 Analysis Time...:
 16:56

Dilution Factor: 4

Method....: SW846 8260B

REPORTING

		REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	4.0	ug/L
Bromobenzene	ND	4.0	ug/L
Bromochloromethane	ND	4.0	ug/L
Bromodichloromethane	ND	4.0	ug/L
Bromoform	ND	4.0	ug/L
Bromomethane	ND	8.0	ug/L
n-Butylbenzene	ND	4.0	ug/L
sec-Butylbenzene	ND	4.0	ug/L
tert-Butylbenzene	ND	4.0	ug/L
Carbon tetrachloride	ND	4.0	ug/L
Chlorobenzene	ND	4.0	ug/L
Chlorodibromomethane	ND	4.0	ug/L
Chloroethane	ND	8.0	ug/L
Chloroform	ND	4.0	ug/L
Chloromethane	ND	8.0	ug/L
2-Chlorotoluene	ND	4.0	ug/L
4-Chlorotoluene	ND	4.0	ug/L
Dibromomethane	ND	4.0	ug/L
1,2-Dichlorobenzene	ND	4.0	ug/L
1,3-Dichlorobenzene	ND	4.0	ug/L
1,4-Dichlorobenzene	ND	4.0	ug/L
Dichlorodifluoromethane	ND	8.0	ug/L
1,1-Dichloroethane	10	4.0	ug/L
1,2-Dichloroethane	ND	4.0	ug/L
1,1-Dichloroethene	ND	4.0	ug/L
cis-1,2-Dichloroethene	120	4.0	ug/L
trans-1,2-Dichloroethene	ND	2.0	ug/L
1,2-Dichloropropane	ND	4.0	ug/L
1,3-Dichloropropane	ND	4.0	ug/L
2,2-Dichloropropane	ND	20	ug/L
1,1-Dichloropropene	ND	4.0	ug/L
Ethylbenzene	ND	4.0	ug/L
Trichlorofluoromethane	ND	8.0	ug/L
Hexachlorobutadiene	ND	4.0	ug/L
Isopropylbenzene	ND	4.0	ug/L
p-Isopropyltoluene	ND	4.0	ug/L
Methylene chloride	ND	4.0	ug/L
Naphthalene	ND	4.0	ug/L

Client Sample ID: SK-5S

Lot-Sample #: D1K130267-009	Work Order #: ENV3P1AC	Matrix: WATER
-----------------------------	------------------------	---------------

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	4.0	ug/L
Styrene	ND	4.0	ug/L
1,1,1,2-Tetrachloroethane	ND	4.0	ug/L
1,1,2,2-Tetrachloroethane	ND	4.0	ug/L
Tetrachloroethene	230	4.0	ug/L
Toluene	ND	4.0	ug/L
1,2,3-Trichlorobenzene	ND	4.0	ug/L
1,2,4-Trichloro-	ND	4.0	ug/L
benzene			
1,1,1-Trichloroethane	24	4.0	ug/L
1,1,2-Trichloroethane	ND	4.0	ug/L
Trichloroethene	90	4.0	ug/L
1,2,3-Trichloropropane	ND	4.0	ug/L
1,2,4-Trimethylbenzene	ND	4.0	ug/L
1,3,5-Trimethylbenzene	ND	4.0	ug/L
Vinyl chloride	ND	4.0	ug/L
o-Xylene	ND	4.0	ug/L
m-Xylene & p-Xylene	ND	8.0	ug/L
1,2-Dibromo-3-	ND	8.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	4.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	108	(80 - 120))
1,2-Dichloroethane-d4	108	(72 - 127	7)
4-Bromofluorobenzene	88	(79 - 119	9)
Toluene-d8	108	(79 - 119))

Client Sample ID: SK-5D

GC/MS Volatiles

Lot-Sample #...: D1K130267-010 Work Order #...: ENV3V1AC Matrix..... WATER

Date Sampled...: 11/11/01 12:35 Date Received..: 11/13/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 11:55

Dilution Factor: 4

Method.....: SW846 8260B

		REPORTIN	1G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	4.0	ug/L
Bromobenzene	ND	4.0	ug/L
Bromochloromethane	ND	4.0	ug/L
Bromodichloromethane	ND	4.0	ug/L
Bromoform	ND	4.0	ug/L
Bromomethane	ND	8.0	ug/L
n-Butylbenzene	ND	4.0	ug/L
sec-Butylbenzene	ND	4.0	ug/L
tert-Butylbenzene	ND	4.0	ug/L
Carbon tetrachloride	ND	4.0	ug/L
Chlorobenzene	ND	4.0	ug/L
Chlorodibromomethane	ND	4.0	ug/L
Chloroethane	ND	8.0	ug/L
Chloroform	ND	4.0	ug/L
Chloromethane	ND	8.0	ug/L
2-Chlorotoluene	ND	4.0	ug/L
4-Chlorotoluene	ND	4.0	ug/L
Dibromomethane	ND	4.0	ug/L
1,2-Dichlorobenzene	ND	4.0	ug/L
1,3-Dichlorobenzene	ND	4.0	ug/L
1,4-Dichlorobenzene	ND	4.0	ug/L
Dichlorodifluoromethane	ND	8.0	ug/L
1,1-Dichloroethane	ND	4.0	ug/L
1,2-Dichloroethane	ND	4.0	ug/L
1,1-Dichloroethene	ND	4.0	ug/L
cis-1,2-Dichloroethene	20	4.0	ug/L
trans-1,2-Dichloroethene	ND	2.0	ug/L
1,2-Dichloropropane	ND	4.0	ug/L
1,3-Dichloropropane	ND	4.0	ug/L
2,2-Dichloropropane	ND	20	ug/L
1,1-Dichloropropene	ND	4.0	ug/L
Ethylbenzene	ND	4.0	ug/L
Trichlorofluoromethane	ND	8.0	ug/L
Hexachlorobutadiene	ND	4.0	ug/L
Isopropylbenzene	NĎ	4.0	ug/L
p-Isopropyltoluene	ND	4.0	ug/L
Methylene chloride	NTD	4 0	
Naphthalene	ND	4.0	ug/L

Client Sample ID: SK-5D

Lot-Sample #: D1K130267-010	Work Order	#: ENV3V1AC	Matrix:	WATER
-----------------------------	------------	-------------	---------	-------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	4.0	ug/L
Styrene	ND .	4.0	ug/L
1,1,1,2-Tetrachloroethane	ND	4.0	ug/L
1,1,2,2-Tetrachloroethane	ND	4.0	ug/L
Tetrachloroethene	ND	4.0	ug/L
Toluene	ND	4.0	ug/L
1,2,3-Trichlorobenzene	ND	4.0	ug/L
1,2,4-Trichloro-	ND	4.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	4.0	ug/L
1,1,2-Trichloroethane	ND	4.0	ug/L
Trichloroethene	120	4.0	ug/L
1,2,3-Trichloropropane	ND	4.0	ug/L
1,2,4-Trimethylbenzene	ND	4.0	ug/L
1,3,5-Trimethylbenzene	ND	4.0	ug/L
Vinyl chloride	ND	4.0	ug/L
o-Xylene	ND	4.0	ug/L
m-Xylene & p-Xylene	ND	8.0	ug/L
1,2-Dibromo-3-	ND	8.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	4.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	103	(80 - 120)
1,2-Dichloroethane-d4	101	(72 - 127	
4-Bromofluorobenzene	91	(79 - 119	•
Toluene-d8	114	(79 - 119	

Client Sample ID: SK-6S

GC/MS Volatiles

Lot-Sample #...: D1K130267-011 Work Order #...: ENV3W1AC Matrix...... WATER

Date Sampled...: 11/11/01 07:15 Date Received..: 11/13/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324409 Analysis Time..: 17:46

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	2.8	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
		•	

Client Sample ID: SK-6S

Lot-Sample #: D1K130267-011	Work Order #: ENV3W1AC	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	2.0	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND ,	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	_
Dibromofluoromethane	104	(80 - 120)
1,2-Dichloroethane-d4	102	(72 - 127)
4-Bromofluorobenzene	95	(79 - 119)
Toluene-d8	108	(79 - 119)

Client Sample ID: SK-10S

GC/MS Volatiles

Lot-Sample #...: D1K130267-012 Work Order #...: ENV3X1AC Matrix...... WATER

Date Sampled...: 11/11/01 14:15 Date Received..: 11/13/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324409 Analysis Time..: 18:12

Dilution Factor: 4

Method....: SW846 8260B

		REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	4.0	ug/L
Bromobenzene	ND	4.0	ug/L
Bromochloromethane	ND	4.0	ug/L
Bromodichloromethane	ND	4.0	ug/L
Bromoform	ND	4.0	ug/L
Bromomethane	ND	8.0	ug/L
n-Butylbenzene	ND	4.0	ug/L
sec-Butylbenzene	ND	4.0	ug/L
tert-Butylbenzene	ND	4.0	ug/L
Carbon tetrachloride	ND	4.0	ug/L
Chlorobenzene	ND	4.0	ug/L
Chlorodibromomethane	ND	4.0	ug/L
Chloroethane	ND	8.0	ug/L
Chloroform	ND	4.0	ug/L
Chloromethane	ND	8.0	ug/L
2-Chlorotoluene	ND	4.0	ug/L
4-Chlorotoluene	ND	4.0	ug/L
Dibromomethane	ND	4.0	ug/L
1,2-Dichlorobenzene	ND	4.0	ug/L
1,3-Dichlorobenzene	ND	4.0	ug/L
1,4-Dichlorobenzene	ND	4.0	ug/L
Dichlorodifluoromethane	ND	8.0	ug/L
1,1-Dichloroethane	11	4.0	ug/L
1,2-Dichloroethane	ND	4.0	ug/L
1,1-Dichloroethene	ND	4.0	ug/L
cis-1,2-Dichloroethene	110	4.0	ug/L
trans-1,2-Dichloroethene	ND	2.0	ug/L
1,2-Dichloropropane	ND	4.0	ug/L
1,3-Dichloropropane	ND	4.0	ug/L
2,2-Dichloropropane	ND	20	ug/L
1,1-Dichloropropene	ND	4.0	ug/L
Ethylbenzene	ND	4.0	ug/L
Trichlorofluoromethane	ND	8.0	ug/L
Hexachlorobutadiene	ND	4.0	ug/L
Isopropylbenzene	ND	4.0	ug/L
p-Isopropyltoluene	ND	4.0	ug/L
Methylene chloride	ND	4.0	ug/L
Naphthalene	ND	4.0	ug/L
		- · ·	~3/ ~

Client Sample ID: SK-10S

Lot-Sample #: D1K130267-012	Work Order #: ENV3X1AC	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	4.0	ug/L
Styrene	ND	4.0	ug/L
1,1,1,2-Tetrachloroethane	ND	4.0	ug/L
1,1,2,2-Tetrachloroethane	ND	4.0	ug/L
Tetrachloroethene	56	4.0	ug/L
Toluene	ND	4.0	ug/L
1,2,3-Trichlorobenzene	ND	4.0	ug/L
1,2,4-Trichloro-	ND	4.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	4.0	ug/L
1,1,2-Trichloroethane	ND	4.0	ug/L
Trichloroethene	9.7	4.0	ug/L
1,2,3-Trichloropropane	ND	4.0	ug/L
1,2,4-Trimethylbenzene	ND	4.0	ug/L
1,3,5-Trimethylbenzene	ND	4.0	ug/L
Vinyl chloride	51	4.0	ug/L
o-Xylene	ND	4.0	ug/L
m-Xylene & p-Xylene	ND	8.0	ug/L
1,2-Dibromo-3-	ND	8.0	ug/L
chloropropane (DBCP)		•	
1,2-Dibromoethane (EDB)	ND	4.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	105	(80 - 120)	
1,2-Dichloroethane-d4	101	(72 - 127)	
4-Bromofluorobenzene	98	(79 - 119)	
Toluene-d8	114	(79 - 119)	

Client Sample ID: SK-25D

GC/MS Volatiles

Lot-Sample #...: D1K130267-013 Work Order #...: ENV311AC Matrix..... WATER

Date Sampled...: 11/11/01 13:00 Date Received..: 11/13/01
Prep Date....: 11/19/01 Analysis Date..: 11/19/01
Prep Batch #...: 1324409 Analysis Time..: 18:37

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTI	i G
PARAMETER	RESULT	LIMIT	UNITS
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND ,	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: SK-25D

Lot-Sample #: D1K130267-013	Work Order #: ENV3	11AC Matrix WATER
-----------------------------	--------------------	-------------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			,
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	.
Dibromofluoromethane	106	(80 - 120	
1,2-Dichloroethane-d4	102	(72 - 127	
4-Bromofluorobenzene	101	(79 - 119	
Toluene-d8	109	(79 - 119)

Client Sample ID: SK-26S

GC/MS Volatiles

Lot-Sample #...: D1K130267-014 Work Order #...: ENV341AC Matrix...... WATER

 Date Sampled...:
 11/11/01 13:30
 Date Received...:
 11/13/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324409
 Analysis Time...:
 19:03

Dilution Factor: 4

Method..... SW846 8260B

DADAMETED	DEGITE M	REPORTI	
PARAMETER Benzene	RESULT	LIMIT	UNITS
Bromobenzene	ND	4.0	ug/L
Bromochloromethane	ND	4.0	ug/L
Bromodichloromethane	ND	4.0	ug/L
Bromoform	ND	4.0	ug/L
Bromomethane	ND	4.0	ug/L
	ND	8.0	ug/L
n-Butylbenzene	ND	4.0	ug/L
sec-Butylbenzene	ND	4.0	ug/L
tert-Butylbenzene Carbon tetrachloride	ND	4.0	ug/L
Carbon tetrachioride Chlorobenzene	ND	4.0	ug/L
	ND	4.0	ug/L
Chlorodibromomethane	ND	4.0	ug/L
Chloroethane Chloroform	ND	8.0	ug/L
	ND	4.0	ug/L
Chloromethane	ND	8.0	ug/L
2-Chlorotoluene	ND	4.0	ug/L
4-Chlorotoluene	ND	4.0	ug/L
Dibromomethane	ND	4.0	ug/L
1,2-Dichlorobenzene	ND	4.0	ug/L
1,3-Dichlorobenzene	ND	4.0	ug/L
1,4-Dichlorobenzene	ND	4.0	ug/L
Dichlorodifluoromethane	ND	8.0	ug/L
1,1-Dichloroethane	14	4.0	ug/L
1,2-Dichloroethane	ND	4.0	ug/L
l,1-Dichloroethene	ND	4.0	ug/L
cis-1,2-Dichloroethene	140	4.0	ug/L
rans-1,2-Dichloroethene	ND	2.0	ug/L
1,2-Dichloropropane	ND	4.0	ug/L
1,3-Dichloropropane	ND	4.0	ug/L
2,2-Dichloropropane	ND	20	ug/L
1,1-Dichloropropene	ND	4.0	ug/L
Ethylbenzene	ND	4.0	ug/L
richlorofluoromethane	ND	8.0	ug/L
Mexachlorobutadiene	ND	4.0	ug/L
Sopropylbenzene	ND	4.0	ug/L
-Isopropyltoluene	ND	4.0	ug/L
Methylene chloride	ND	4.0	ug/L
aphthalene	ND	4.0	ug/L

Client Sample ID: SK-26S

Lot-Sample #:	D1K130267-014	Work Order	#: ENV341AC	Matrix:	WATER
---------------	---------------	------------	-------------	---------	-------

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	4.0	ug/L
Styrene	ND	4.0	ug/L
1,1,1,2-Tetrachloroethane	ND	4.0	ug/L
1,1,2,2-Tetrachloroethane	ND	4.0	ug/L
Tetrachloroethene	67	4.0	ug/L
Toluene	ND	4.0	ug/L
1,2,3-Trichlorobenzene	ND	4.0	ug/L
1,2,4-Trichloro-	ND	4.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	4.0	ug/L
1,1,2-Trichloroethane	ND	4.0	ug/L
Trichloroethene	12	4.0	ug/L
1,2,3-Trichloropropane	ND	4.0	ug/L
1,2,4-Trimethylbenzene	ND	4.0	ug/L
1,3,5-Trimethylbenzene	ND	4.0	ug/L
Vinyl chloride	59	4.0	ug/L
o-Xylene	ND	4.0	ug/L
m-Xylene & p-Xylene	ND	8.0	ug/L
1,2-Dibromo-3-	ND	8.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	4.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	108	(80 - 120	0)
1,2-Dichloroethane-d4	106	(72 - 12	7)
4-Bromofluorobenzene	99	(79 - 119	9)
Toluene-d8	115	(79 - 119	9)

Client Sample ID: SK-27S

GC/MS Volatiles

Lot-Sample #...: D1K130267-015 Work Order #...: ENV371AC Matrix...... WATER

Date Sampled...: 11/11/01 14:00 Date Received..: 11/13/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324409 Analysis Time..: 19:29

Dilution Factor: 5

Method..... SW846 8260B

		REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	10	ug/L
n-Butylbenzene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
tert-Butylbenzene	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Chlorodibromomethane	. ND	5.0	ug/L
Chloroethane	ND	10	ug/L
Chloroform	ND	5.0	ug/L
Chloromethane	ND	10	ug/L
2-Chlorotoluene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
Dichlorodifluoromethane	ND	10	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
cis-1,2-Dichloroethene	7.1	5.0	ug/L
trans-1,2-Dichloroethene	ND	2.5	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
1,3-Dichloropropane	ND	5.0	ug/L
2,2-Dichloropropane	ND	25	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
Ethylbenzene	32	5.0	ug/L
Trichlorofluoromethane	ND	10	ug/L
Hexachlorobutadiene	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
p-Isopropyltoluene	ND	5.0	ug/L
Methylene chloride	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
			J

Client Sample ID: SK-27S

Lot-Sample #: D1K130267-015	Work Order #: ENV371AC	Matrix: WATER
-----------------------------	------------------------	---------------

		REPORTIN	IG
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	6.2	5.0	ug/L
Styrene	ND	5.0	ug/L
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
Tetrachloroethene	9.2	5.0	ug/L
Toluene	93	5.0	ug/L
1,2,3-Trichlorobenzene	ND	5.0	ug/L
1,2,4-Trichloro-	ND	5.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
Trichloroethene	35	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
1,2,4-Trimethylbenzene	57	5.0	ug/L
1,3,5-Trimethylbenzene	14	5.0	ug/L
Vinyl chloride	ND	5.0	ug/L
o-Xylene	44	5.0	ug/L
m-Xylene & p-Xylene	120	10	ug/L
1,2-Dibromo-3-	ND	10	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	109	(80 - 12	0)
1,2-Dichloroethane-d4	111	(72 - 12	7) .
4-Bromofluorobenzene	95	(79 - 11	9)
Toluene-d8	111	(79 - 11	9)

Client Sample ID: TB-04

GC/MS Volatiles

Lot-Sample #...: D1K130267-016 Work Order #...: ENV391AA Matrix...... WATER

 Date Sampled...:
 11/11/01
 Date Received..:
 11/13/01

 Prep Date....:
 11/19/01
 Analysis Date..:
 11/19/01

 Prep Batch #...:
 1324409
 Analysis Time..:
 19:55

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND ·	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND		- ·

Client Sample ID: TB-04

Lot-Sample #: D1K130267-016	Work Order #: ENV391AA	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene		•	
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	111	(80 - 120	0)
1,2-Dichloroethane-d4	114	(72 - 127	')
4-Bromofluorobenzene	100	(79 - 119	9)
Toluene-d8	111	(79 - 119))

Client Sample ID: TB-05

GC/MS Volatiles

Lot-Sample #...: D1K130267-017 Work Order #...: ENV4C1AA Matrix...... WATER

 Date Sampled...: 11/11/01
 Date Received..: 11/13/01

 Prep Date....: 11/19/01
 Analysis Date..: 11/19/01

 Prep Batch #...: 1324409
 Analysis Time..: 20:21

Dilution Factor: 1

Method..... SW846 8260B

		REPORTII	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
			- ·

Client Sample ID: TB-05

Lot-Sample #: D1K130267-017 W	Work Order #.	: ENV4C1AA	Matrix:	WATER
-------------------------------	---------------	------------	---------	-------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	_
Dibromofluoromethane	113	(80 - 120)	
1,2-Dichloroethane-d4	115	(72 - 127))
4-Bromofluorobenzene	97	(79 - 119))
Toluene-d8	112	(79 - 119))

Client Sample ID: SK-28S

GC/MS Volatiles

Lot-Sample #...: D1K130267-018 Work Order #...: ENV4G1AC Matrix..... WATER

Date Sampled...: 11/11/01 14:30 Date Received..: 11/13/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324409 Analysis Time..: 20:47

Dilution Factor: 1

Method.....: SW846 8260B

1		REPORTIN	1G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	5.4	1.0	ug/L
sec-Butylbenzene	2.4	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	1.5	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	1.9	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	5.9	1.0	ug/L

Client Sample ID: SK-28S

Lot-Sample #: D1K130267-018	Work Order	#: ENV4G1AC	Matrix:	WATER
-----------------------------	------------	-------------	---------	-------

PARAMETER RESULT LIMIT UNITS n-Propylbenzene 2.7 1.0 ug/L Styrene ND 1.0 ug/L 1,1,2-Tetrachloroethane ND 1.0 ug/L 1,1,2,2-Tetrachloroethane ND 1.0 ug/L Tetrachloroethene ND 1.0 ug/L Toluene ND 1.0 ug/L 1,2,3-Trichlorobenzene ND 1.0 ug/L
Styrene ND 1.0 ug/L 1,1,1,2-Tetrachloroethane ND 1.0 ug/L 1,1,2,2-Tetrachloroethane ND 1.0 ug/L Tetrachloroethene ND 1.0 ug/L Toluene ND 1.0 ug/L 1,2,3-Trichlorobenzene ND 1.0 ug/L
1,1,1,2-Tetrachloroethane ND 1.0 ug/L 1,1,2,2-Tetrachloroethane ND 1.0 ug/L Tetrachloroethene ND 1.0 ug/L Toluene ND 1.0 ug/L 1,2,3-Trichlorobenzene ND 1.0 ug/L
1,1,2,2-Tetrachloroethane ND 1.0 ug/L Tetrachloroethene ND 1.0 ug/L Toluene ND 1.0 ug/L 1,2,3-Trichlorobenzene ND 1.0 ug/L
Tetrachloroethene ND 1.0 ug/L Toluene ND 1.0 ug/L 1,2,3-Trichlorobenzene ND 1.0 ug/L
Toluene ND 1.0 ug/L 1,2,3-Trichlorobenzene ND 1.0 ug/L
1,2,3-Trichlorobenzene ND 1.0 ug/L
·
1,2,4-Trichloro- ND 1.0 ug/L
benzene
1,1,1-Trichloroethane ND 1.0 ug/L
1,1,2-Trichloroethane ND 1.0 ug/L
Trichloroethene ND 1.0 ug/L
1,2,3-Trichloropropane ND 1.0 ug/L
1,2,4-Trimethylbenzene ND 1.0 ug/L
1,3,5-Trimethylbenzene ND 1.0 ug/L
Vinyl chloride ND 1.0 ug/L
o-Xylene ND 1.0 ug/L
m-Xylene & p-Xylene ND 2.0 ug/L
1,2-Dibromo-3- ND 2.0 ug/L
chloropropane (DBCP)
1,2-Dibromoethane (EDB) ND 1.0 ug/L
PERCENT RECOVERY
SURROGATE RECOVERY LIMITS
Dibromofluoromethane 113 (80 - 120)
1,2-Dichloroethane-d4 118 (72 - 127)
4-Bromofluorobenzene 92 (79 - 119)
Toluene-d8 109 (79 - 119)

Client Sample ID: SK-1S

GC Volatiles

Lot-Sample #...: D1K130267-001 Work Order #...: ENV291AC Matrix...... WATER

Date Sampled...: 11/11/01 08:15 Date Received..: 11/13/01
Prep Date....: 11/21/01 Analysis Date..: 11/21/01
Prep Batch #...: 1332454 Analysis Time..: 03:10

Dilution Factor: 1

Method..... RSK SOP-175

REPORTING

PARAMETER RESULT UNITS LIMIT Ethane' ND 0.50 ug/L Ethene' ND 0.50 ug/L Methane 0.70 0.50 ug/L

Client Sample ID: SK-1D

GC Volatiles

Lot-Sample #...: D1K130267-002 Work Order #...: ENV3E1AD Matrix...... WATER

 Date Sampled...:
 11/11/01 07:45
 Date Received...:
 11/13/01

 Prep Date.....:
 11/21/01
 Analysis Date...:
 11/21/01

 Prep Batch #...:
 1332454
 Analysis Time...:
 03:12

Dilution Factor: 1

Method....: RSK SOP-175

		REPORTIN	REPORTING	
PARAMETER	RESULT	LIMIT	UNITS	
Ethane	ND	0.50	ug/L	
Ethene	ND	0.50	ug/L	
Methane	0.92	0.50	ug/L	

Client Sample ID: SK-2S

GC Volatiles

Lot-Sample #:	D1K130267-003	Work Order	#: ENV3F1AD	Matrix:	WATER
		_			

 Date Sampled...:
 11/11/01 11:00 Date Received...:
 11/13/01

 Prep Date.....:
 11/21/01
 Analysis Date...:
 11/21/01

 Prep Batch #...:
 1332454
 Analysis Time...:
 03:15

Dilution Factor: 1

Method..... RSK SOP-175

REPORTING

PARAMETER	RESULT	LIMIT	UNITS
Ethane	ND	0.50	ug/L
Ethene	ND	0.50	ug/L
Methane	160 E	0.50	ug/L

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

Client Sample ID: SK-3S

GC Volatiles

Lot-Sample #...: D1K130267-005 Work Order #...: ENV3H1AD Matrix....: WATER

Date Sampled...: 11/11/01 10:05 Date Received..: 11/13/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Analysis Time..: 03:30

Prep Batch #...: 1332454 Dilution Factor: 1

Method..... RSK SOP-175

REPORTING

PARAMETER	RESULT	LIMIT	UNITS
Ethane	ND	0.50	ug/L
Ethene	ND	0.50	ug/L
Methane	7.4	0.50	ug/L

Client Sample ID: SK-2S

GC Volatiles

Lot-Sample #...: D1K130267-003 Work Order #...: ENV3F2AD Matrix...... WATER

Date Sampled...: 11/11/01 11:00 Date Received..: 11/13/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332454 Analysis Time..: 03:21

Prep Batch #...: 1332454 Ana Dilution Factor: 3

Method..... RSK SOP-175

REPORTING

			•	
PARAMETER	RESULT	LIMIT	UNITS	
Ethane	ND	1.5	ug/L	
Ethene	ND	1.5	ug/L	
Methane	160 D	1.5	ug/L	

NOTE(S):

D Result was obtained from the analysis of a dilution.

Client Sample ID: SK-2D

GC Volatiles

Lot-Sample #...: D1K130267-004 Work Order #...: ENV3G1AD Matrix...... WATER

Date Sampled...: 11/11/01 11:30 Date Received..: 11/13/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332454 Analysis Time..: 03:27

Dilution Factor: 1

Method..... RSK SOP-175

REPORTING

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
Ethane	ND	0.50	ug/L	
Ethene	ND	0.50	ug/L	
Methane	1.7	0.50	ug/L	

Client Sample ID: SK-3D

GC Volatiles

Lot-Sample #...: D1K130267-006 Work Order #...: ENV3L1AD Matrix...... WATER

Date Sampled...: 11/11/01 10:35 Date Received..: 11/13/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01

Prep Batch #...: 1332454 Analysis Time..: 03:33

Dilution Factor: 1
Method....: RSK SOP-175

DEDODETNO

			REPORTIN	G	
PARAMETER		RESULT	LIMIT	UNITS	
Ethane	# #	ND	0.50	ug/L	
Ethene		ND	0.50	ug/L	
Methane		0.88	0.50	ua/L	

Client Sample ID: SK-4S

GC Volatiles

Lot-S	Sample	#:	D1K130267-007	Work Order #: ENV3M1AD	Matrix:	WATER
		_				

 Date Sampled...:
 11/11/01 09:40 Date Received...:
 11/13/01

 Prep Date.....:
 11/21/01 Analysis Time...:
 03:35

 Prep Batch #...:
 1332454 Analysis Time...:
 03:35

Dilution Factor: 1

Method.....: RSK SOP-175

		REPORTIN	IG	
PARAMETER	RESULT	LIMIT	UNITS	
Ethane	ND	0.50	ug/L	_
Ethene	ND	0.50	ug/L	
Methane	4.3	0.50	ug/L	

Client Sample ID: SK-4D

GC Volatiles

Lot-Sample #...: D1K130267-008 Work Order #...: ENV3N1AD Matrix....: WATER

Date Sampled...: 11/11/01 15:15 Date Received..: 11/13/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Analysis Time..: 03:38

Prep Batch #...: 1332454 Dilution Factor: 1

Method....: RSK SOP-175

DEDODUTAG

·		REPORTIN	G .
PARAMETER	RESULT	LIMIT	<u>UNITS</u>
Ethane	ND	0.50	ug/L
Ethene	ND	0.50	ug/L
Methane	1.9	0.50	ug/L

Client Sample ID: SK-5S

GC Volatiles

Lot-Sample #: D1K130267-009	Work Order #: ENV3P1AD	Matrix WATER
-----------------------------	------------------------	--------------

Date Sampled...: 11/11/01 12:05 Date Received..: 11/13/01 Prep Date.....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332454 Analysis Time.:: 03:41

Dilution Factor: 1

Method..... RSK SOP-175

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Ethane	ND	0.50	ug/L
Ethene	ND	0.50	ug/L
Methane	110 E	0.50	ug/L

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

Client Sample ID: SK-5S

GC Volatiles

Lot-Sample #:	D1K130267-009	Work Order #: ENV3P2AD	Matrix:	WATER

Date Sampled...: 11/11/01 12:05 Date Received..: 11/13/01

Prep Date.....: 11/21/01 Analysis Date..: 11/21/01

Prep Batch # . 1332454 Analysis Date...: 03.47

Prep Batch #...: 1332454 Analysis Time..: 03:47

Dilution Factor: 2

Method..... RSK SOP-175

REPORTING

1			1121 0111 411	•		
PARAMETER		RESULT	LIMIT	UNITS		
Ethane		ND	1.0	ug/L	_	
Ethene		ND	1.0	ug/L		
Methane	r.	110 D	1.0	ug/L		
1				- '		

NOTE(S):

D Result was obtained from the analysis of a dilution.

Client Sample ID: SK-5D

GC Volatiles

Lot-Sample #:	D1K130267-010	Work Order #:	ENV3V1AD	Matrix:	WATER
Date Sampled:	11/11/01 12:35	Date Received:	11/13/01		

Prep Date....: 11/21/01 Analysis Date.: 11/21/01
Prep Batch #...: 1332454 Analysis Time.: 03:53

Dilution Factor: 1

Method..... RSK SOP-175

	REPORTING		
PARAMETER	RESULT	LIMIT UNITS	
Ethane	ND	0.50 ug/L	
Ethene	ND '	0.50 ug/L	
Methane	1 2	0.50 ng/t.	

Client Sample ID: SK-6S

GC Volatiles

Lot-Sample #...: D1K130267-011 Work Order #...: ENV3W1AD Matrix....: WATER

Date Sampled...: 11/11/01 07:15 Date Received..: 11/13/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332454 Analysis Time..: 03:56

Dilution Factor: 1

Method....: RSK SOP-175

		REPORTING		
PARAMETER		RESULT	LIMIT	UNITS
Ethane		ND ·	0.50	ug/L
Ethene		ND ·	0.50	ug/L
Methane		73	0.50	ug/L

Client Sample ID: SK-10S

GC Volatiles

Lot-Sample #...: D1K130267-012 Work Order #...: ENV3X1AD Matrix.....: WATER

 Date Sampled...:
 11/11/01 14:15
 Date Received...:
 11/13/01

 Prep Date....:
 11/21/01
 Analysis Date...:
 11/21/01

 Prep Batch #...:
 1332454
 Analysis Time...:
 04:02

Dilution Factor: 1

Method....: RSK SOP-175

		REPORTIN	G ·	•
PARAMETER	RESULT_	LIMIT	UNITS	
Ethane	2.2	0.50	ug/L	
Ethene	ND	0.50	ug/L	•
Methane	27	0.50	ug/L	

Client Sample ID: SK-25D

GC Volatiles

Lot-Sample #...: D1K130267-013 Work Order #...: ENV311AD Matrix...... WATER

Date Sampled...: 11/11/01 13:00 Date Received..: 11/13/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01

Prep Batch #...: 1332454 Analysis Time..: 04:09

Dilution Factor: 1

Method..... RSK SOP-175

REPORTING

PARAMETER RESULT LIMIT UNITS Ethane ND 0.50 ug/L Ethene ND 0.50 ug/L Methane 0.98 0.50 ug/L

Client Sample ID: SK-26S

GC Volatiles

Lot-Sample #...: D1K130267-014 Work Order #...: ENV341AD Matrix..... WATER

Date Sampled...: 11/11/01 13:30 Date Received..: 11/13/01 Analysis Date..: 11/21/01 Prep Date....: 11/21/01 Analysis Time..: 04:11

Prep Batch #...: 1332454

Dilution Factor: 1 Method.....: RSK SOP-175

REPORTING

			KELOKITM	3		
PARAMETER	RESULT		LIMIT	UNITS		
Ethane		2.3	0.50	ug/L		
Ethene	•	ND	0.50	ug/L		
Methane	* *	27	0.50	ug/L		

Client Sample ID: SK-27S

GC Volatiles

Lot-S	ample #:	D1K130267-015	Work Order	#:	ENV371AD	Matrix:	WATER
-------	----------	---------------	------------	----	----------	---------	-------

 Date
 Sampled...:
 11/11/01 14:00
 Date Received...:
 11/13/01

 Prep
 Date....:
 11/21/01
 Analysis Date...:
 11/21/01

 Prep
 Batch #...:
 1332454
 Analysis Time...:
 04:15

Dilution Factor: 1

Method..... RSK SOP-175

REPORTING

	71		TOTAL OTTAL	G
PARAMETER		RESULT	LIMIT	UNITS
Ethane		ND ·	0.50	ug/L
Ethene		ND	0.50	ug/L
Methane		9.9	0.50	ug/L

Client Sample ID: SK-28S

GC Volatiles

Lot-Sample #: D1K130267-018	Work Order #: ENV4G1AD	Matrix WATER

Date Sampled...: 11/11/01 14:30 Date Received..: 11/13/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01

Prep Batch #...: 1332454 Analysis Time..: 04:25

Dilution Factor: 1 Method..... RSK SOP-175

		REPORTIN	I G
PARAMETER	RESULT	LIMIT	UNITS
Ethane	ND	0.50	ug/L
Ethene	ND	0.50	ug/L
Methane	620 E	0.50	ug/L

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range,

Client Sample ID: SK-28S

GC Volatiles

Lot-Sample #:	D1K130267-018	Work Order #	ENV4G2	AD Matrix	WATER
		11			

Date Sampled...: 11/11/01 14:30 Date Received..: 11/13/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01

Prep Batch #...: 1332454 Analysis Time..: 04:45

Dilution Factor: 50

Method....: RSK SOP-175

REPORTING

1			KEE OKT IN	G	
PARAMETER		RESULT	LIMIT	UNITS	
Ethane		ND	25	ug/L	
Ethene		ND	25	ug/L	
Methane	A .	1900 D	25	ug/L	
				3 -	

NOTE(S):

D Result was obtained from the analysis of a dilution.

Client Sample ID: SK-1S

Lot-Sample #. Date Sampled.			Received.	.: 11/13/01	Matrix:	WATER
		REPORTIN	G		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #. Iron	: 1319495 56.6	0.10 Dilution Fac	mg/L tor: 1	SW846 6010B Analysis Time: 23:41	11/20/01	ENV291AD
Manganese	0.54	0.010 Dilution Fac	mg/L	SW846 6010B Analysis Time: 23:41	11/20/01	ENV291AE

Client Sample ID: SK-1S

DISSOLVED Metals

Lot-Sample #...: D1K130267-001

Date Sampled...: 11/11/01 08:15 Date Received..: 11/13/01

Matrix....: WATER

1							
		REPORTING	G	±		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD)	ANALYSIS DATE	ORDER #
Prep Batch #	: 1319417					.	
Calcium	131	0.20	mg/L	SW846	6010B	11/20/01	ENV291AG
		Dilution Fact	or: 1	Analysis	Time: 21:58		
Iron	ND	0.10	mg/L	SW846	6010B	11/20/01	ENV291AH
		Dilution Fact	or: 1	Analysis	Time: 21:58		
Potassium	ND	.3.0	mg/L	SW846	6010B	11/20/01	ENV291AL
•		Dilution Fact	or: 1	Analysis	Time: 21:58	•	
Magnesium	50.0	0.20	mg/L	SW846	6010B	11/20/01	ENV291AJ
	•	Dilution Fact	or: 1	Analysis	Time: 21:58		
Manganese	0.020	0.010	mg/L	SW846	6010B	11/20/01	ENV291AK
ļ		Dilution Fact	or: 1	Analysis '	Time: 21:58		
Sodium	43.7	5.0	mg/L	SW846	6010B	11/20/01	ENV291AF
7		Dilution Fact	or: 1		Time: 21:58	•	

Client Sample ID: SK-1D

Lot-Sample #. Date Sampled.	: D1K130267	-002 07:45 Date R	eceived.	.: 11/13/01	Matrix:	WATER
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #. Iron	.:: 1319495 0.35	0.10 Dilution Facto	mg/L or: 1	SW846 6010B Analysis Time: 23:56	11/20/01	ENV3E1AE
Manganese	0.069	0.010 Dilution Facto	mg/L or: 1	SW846 6010B Analysis Time: 23:56	11/20/01	ENV3E1AF

Client Sample ID: SK-1D

DISSOLVED Metals

Lot-Sample #...: D1K130267-002 Matrix....: WATER

Date Sampled...: 11/11/01 07:45 Date Received..: 11/13/01

. 1	-					
		REPORTI	1G		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #.	: 1319417				•	
Calcium	164	0.20	mg/L	SW846 6010B	11/20/01	ENV3E1AH
	• .	Dilution Fac	tor: 1	Analysis Time: 22:1	3	
Iron	ND	0.10	mg/L	SW846 6010B	11/20/01	ENV3E1AJ
		Dilution Fac		Analysis Time: 22:1		
Potassium	ND >	3.0	mg/L	SW846 6010B	11/20/01	ENV3E1AM
		Dilution Fac	- '	Analysis Time: 22:1		
Magnesium	62.9	0.20	mg/L	SW846 6010B	11/20/01	ENV3E1AK
		Dilution Fac	_	Analysis Time: 22:1		
Manganese	0.056	0.010	mg/L	SW846 6010B	11/20/01	ENV3E1AL
		Dilution Fac	•	Analysis Time: 22:1	• •	
Sodium	44.9	5.0	mq/L	SW846 6010B	11/20/01	ENV3E1AG
7	1	Dilution Fac		Analysis Time: 22:1		,

Client Sample ID: SK-2S

Lot-Sample #. Date Sampled.	Matrix:	WATER				
PARAMETER	RESULT	REPORTIN	G UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #. Iron	: 1319495 · 385	0.10 Dilution Fact	mg/L cor: 1	SW846 6010B Analysis Time: 00:00	11/20-11/21/01	ENV3F1AE
Manganese	10.5	0.010 Dilution Fact	mg/L	SW846 6010B Analysis Time: 00:00	11/20-11/21/01	ENV3F1AF

Client Sample ID: SK-2S

DISSOLVED Metals

Lot-Sample #...: D1K130267-003 Matrix....: WATER Date Sampled...: 11/11/01 11:00 Date Received..: 11/13/01 PREPARATION-WORK REPORTING ANALYSIS DATE ORDER # PARAMETER RESULT LIMIT UNITS METHOD Prep Batch #...: 1319417 0.20 SW846 6010B 11/20/01 ENV3F1AH Calcium 134 mg/L Dilution Factor: 1 Analysis Time..: 22:17 0.13 0.10 mg/L SW846 6010B 11/20/01 ENV3F1AJ Iron Analysis Time..: 22:17 Dilution Factor: 1 Potassium 3.3 3.0 mg/L SW846 6010B 11/20/01 ENV3F1AM Dilution Factor: 1 Analysis Time..: 22:17 ENV3F1AK Magnesium mg/L SW846 6010B 11/20/01 35.7 0.20 Dilution Factor: 1 Analysis Time..: 22:17 Manganese 2.5 0.010 mq/L SW846 6010B 11/20/01 **ENV3F1AL**

Analysis Time..: 22:17

Analysis Time..: 22:17

SW846 6010B

11/20/01

ENV3F1AG

Dilution Factor: 1

Dilution Factor: 1

mg/L

5.0

Sodium

72.2

Client Sample ID: SK-2D

Lot-Sample #. Date Sampled.	Matrix:	WATER				
		REPORTIN	1G		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #. Iron	.:: 1319495 3.3	0.10	mg/L	SW846 6010B	11/20-11/21/01	ENV3G1AE
•		Dilution Fac	tor: 1	Analysis Time: 00:04		
Manganese `	0.87	0.010	mg/L	SW846 6010B	11/20-11/21/01	ENV3GlAF

Client Sample ID: SK-2D

DISSOLVED Metals

Lot-Sample #...: D1K130267-004 Matrix....: WATER

Date Sampled...: 11/11/01 11:30 Date Received..: 11/13/01

	,,			, ,				
		REPORTI	īG			PREPARATION-	WORK	
PARAMETER	RESULT	LIMIT	UNITS	METHOI)	ANALYSIS DATE	ORDER #	
Prep Batch #	: 1319417							
Calcium	141	0.20	mg/L	SW846	6010B	11/20/01	ENV3G1AH	
		Dilution Factor: 1		Analysis	Time: 22:21			
Iron	ND	0.10	mg/L	SW846	6010B	11/20/01	ENV3G1AJ	
	7.	Dilution Factor: 1		Analysis	Time: 22:21			
Potassium	ND	3.0	mg/L	SW846	6010B	11/20/01	ENV3G1AM	
		Dilution Fac	_		Time: 22:21			
Magnesium	56.8	0.20	mg/L	SW846	6010B	11/20/01	ENV3G1AK	
ب		Dilution Fac		Analysis	Time: 22:21			
Manganese	0.61	0.010	mg/L	SW846	6010B	11/20/01	ENV3G1AL	
		Dilution Fac		Analysis	Time: 22:21			
Sodium	50.1	5.0	mg/L	SW846	6010B	11/20/01	ENV3G1AG	
	22.2	Dilution Fac	٥.		Time: 22:21	· ·		

Client Sample ID: SK-3S

TOTAL Metals

Lot-Sample #...: D1K130267-005 Matrix....: WATER

Date Sampled...: 11/11/01 10:05 Date Received..: 11/13/01

Date Bampied.	11/11/01	10.03 Date	RCCCIVCU.	11/13/01		
		REPORTIN	īG		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #		0.70	/_	OVER A C. COLLOD	11/20 11/21/21	FB177717 3 F
Iron	21.5	0.10	mg/L	SW846 6010B	11/20-11/21/01	ENV3HLAE
		Dilution Fac	cor: 1	Analysis Time: 00:08		
Manganese	1.1	0.010	mg/L	SW846 6010B	11/20-11/21/01	ENV3H1AF
		Dilution Fac	tor: 1	Analysis Time: 00:08		

Client Sample ID: SK-3S

DISSOLVED Metals

Lot-Sample #...: D1K130267-005 Matrix....: WATER

Date Sampled...: 11/11/01 10:05 Date Received..: 11/13/01

			· · · · · · · · · · · · · · · · · · ·	-			
	REPORTI	NG			PREPARATION-	WORK	
RESULT	LIMIT	UNITS	METHO	D .	ANALYSIS DATE	ORDER #	
*						· · · · · · · · · · · · · · · · · · ·	
: 1319417							
102	0.20	mg/L	SW846	6010B	11/20/01	ENV3H1AH	
	Dilution Factor: 1						
ND `	0.10	mg/L	SW846	6010B	11/20/01	ENV3H1AJ	
_	Dilution Fac	tor: 1			,, _		
3.3	3.0	mg/L	SW846	6010B	11/20/01	ENV3H1AM	
•	Dilution Fac	tor: 1					
35.8	0.20	mg/L	SW846	6010B	11/20/01	ENV3H1AK	
; ••	Dilution Fac	tor: 1		,	, -,		
0.94	0.010	mg/L	SW846	6010B	11/20/01	ENV3H1AL	
	Dilution Fac	_			,,	M. () 11 11 11	
46.8	5.0	mg/L	SW846	6010B	11/20/01	ENV3H1AG	
*.	Dilution Fac	-			11,20,01	III. A DILING	
	.:: 1319417 102 ND 3.3 35.8	RESULT LIMIT .:: 1319417 102 0.20 Dilution Factor ND 0.10 Dilution Factor 3.3 3.0 Dilution Factor 35.8 0.20 Dilution Factor 0.94 0.010 Dilution Factor 46.8 5.0	.:: 1319417 102	### RESULT LIMIT UNITS METHO 102 0.20 mg/L SW846 Dilution Factor: 1 Analysis ND	### RESULT LIMIT UNITS METHOD 1319417 102 0.20 mg/L SW846 6010B Dilution Factor: 1 Analysis Time: 22:24 ND 0.10 mg/L SW846 6010B Dilution Factor: 1 Analysis Time: 22:24 3.3 3.0 mg/L SW846 6010B Dilution Factor: 1 Analysis Time: 22:24 35.8 0.20 mg/L SW846 6010B Dilution Factor: 1 Analysis Time: 22:24 0.94 0.010 mg/L SW846 6010B Dilution Factor: 1 Analysis Time: 22:24 46.8 5.0 mg/L SW846 6010B	### RESULT LIMIT UNITS METHOD ANALYSIS DATE .: 1319417 102	

Client Sample ID: SK-3D

TOTAL Metals

Lot-Sample # Date Sampled	Matrix:	WATER				
	•	REPORTING			PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	: 1319495					
Iron	11.3	0.10	mg/L	SW846 6010B	11/20-11/21/01	ENV3L1AE
Dilution Factor: 1				Analysis Time: 00:19		
Manganese	0.55	0.010	mg/L	SW846 6010B	11/20-11/21/01	ENV3L1AF

Analysis Time..: 00:19

Dilution Factor: 1

Client Sample ID: SK-3D

DISSOLVED Metals

Lot-Sample #...: D1K130267-006

Date Sampled...: 11/11/01 10:35 Date Received..: 11/13/01

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #. Calcium	.:: 1319417 106	0.20 Dilution Factor	mg/L or: 1	SW846 6010B Analysis Time: 22:	11/20/01 36	ENV3L1AH
Iron	ND	0.10 Dilution Facto	mg/L or: 1	SW846 6010B Analysis Time: 22:	11/20/01	ENV3L1AJ
Potassium	ND	3.0 Dilution Facto	mg/L r: 1	SW846 6010B Analysis Time: 22:	• •	ENV3L1AM
Magnesium	40.5	0.20 Dilution Facto	mg/L r: 1	SW846 6010B Analysis Time: 22:	11/20/01	ENV3L1AK
Manganese	0.33	0.010 Dilution Facto	mg/L r: 1	SW846 6010B Analysis Time: 22:	11/20/01	ENV3L1AL
Sodium	44.6	5.0 Dilution Facto	mg/L r: 1	SW846 6010B Analysis Time: 22:	11/20/01	ENV3L1AG

Matrix....: WATER

Client Sample ID: SK-4S

Lot-Sample #: D1K130267-007 Date Sampled: 11/11/01 09:40 Date Received: 11/13/01						Matrix:	WATER
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOL		PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	.: 1319495						
Iron	0.85	0.10 Dilution Facto	mg/L or: 1		6010B Time: 00:23	11/20-11/21/01	ENV3MLAE
Manganese	1.9	0.010 Dilution Facto	mg/L	SW846 Analysis	6010B Time: 00:23	11/20-11/21/01	ENV3M1AF

Client Sample ID: SK-4S

DISSOLVED Metals

Lot-Sample #...: D1K130267-007 Matrix....: WATER

Date Sampled...: 11/11/01 09:40 Date Received..: 11/13/01

PARAMETER	RESULT	REPORTIN	IG UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #	
Prep Batch #.	: 1319417						
Calcium	138	0.20	mg/L	SW846 6010B	11/20/01	ENV3M1AH	
•		Dilution Fac	tor: 1	Analysis Time: 22:40			
Iron	ND	0.10	mg/L	SW846 6010B	11/20/01	ENV3M1AJ	
		Dilution Fac	tor: 1	Analysis Time: 22:40			
Potassium	3.3	3.0	mg/L	SW846 6010B	11/20/01	ENV3M1AM	
		Dilution Fac	tor: 1	Analysis Time: 22:40			
Magnesium	38.3	0.20	mg/L	SW846 6010B	11/20/01	ENV3M1AK	
		Dilution Fac	tor: 1	Analysis Time: 22:40			
Manganese	1.8	0.010	mg/L	SW846 6010B	11/20/01	ENV3M1AL	
		Dilution Fac	tor: 1	Analysis Time: 22:40			
Sodium	43.1	5.0	mq/L	SW846 6010B	11/20/01	ENV3M1AG	
		Dilution Fac	٥.	Analysis Time: 22:40	,,		

Client Sample ID: SK-4D

TOTAL Metals

Lot-Sample # Date Sampled	Matrix:	WATER					
•		REPORTING				PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD)	ANALYSIS DATE	ORDER #
Prep Batch #	: 1319495		•				:
Iron	0.50	0.10	mg/L	SW846	6010B	11/20-11/21/01	ENV3N1AE
Dilution Factor: 1			or: 1	Analysis Time: 00:27			
Manganese	1.5	0.010	mg/L	SW846	6010B	11/20-11/21/01	ENV3N1AF

Analysis Time..: 00:27

Dilution Factor: 1

Client Sample ID: SK-4D

DISSOLVED Metals

Lot-Sample #...: D1K130267-008

Date Sampled...: 11/11/01 15:15 Date Received..: 11/13/03

		REPORTI	1G		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
			1			операте п
Prep Batch #.	: 1319417				•	
Calcium , 120	, 120	0.20	mg/L	SW846 6010B	11/20/01	ENV3N1AH
		Dilution Fac	tor: 1	Analysis Time: 22:44	•	'.
Iron ND	ND	0.10	mg/L	SW846 6010B	11/20/01	ENV3N1AJ
		Dilution Fac	tor: 1	Analysis Time: 22:44	•	
Potassium	3.0	3.0	mg/L	SW846 6010B	11/20/01	ENV3N1AM
		Dilution Fac	tor: 1	Analysis Time: 22:44		
Magnesium	45.7	0.20	mg/L	SW846 6010B	11/20/01	ENV3N1AK
		Dilution Fac	tor: 1	Analysis Time: 22:44	,,	IIIVONIAIK
Manganese	1.4	0.010	mg/L	SW846 6010B	11/20/01	ENV3N1AL
		Dilution Fact	tor: 1	Analysis Time: 22:44	-1,20,01	THAT A TATA
Sodium	50.0	5.0	mg/L	SW846 6010B	11/20/01	PMCM130
}		Dilution Fact		Analysis Time: 22:44	11,20,01	ENV3N1AG

Matrix....: WATER

Client Sample ID: SK-5S

Lot-Sample # Date Sampled	Matrix:	WATER				
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch # Iron	.: 1319495 35.6	0.10 Dilution Factor	mg/L or: 1	SW846 6010B Analysis Time: 00:31	11/20-11/21/01	ENV3P1AE
Manganese	3.5	0.010 Dilution Facto	mg/L or: 1	SW846 6010B Analysis Time: 00:31	11/20-11/21/01	ENV3P1AF

Client Sample ID: SK-5S

DISSOLVED Metals

Lot-Sample #...: D1K130267-009 Matrix....: WATER Date Sampled...: 11/11/01 12:05 Date Received..: 11/13/01

PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	: 1319417				,
Calcium	128	0.20 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 22:47	11/20/01	ENV3P1AH
Iron	2.6	0.10 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 22:47	11/20/01	ENV3P1AJ
Potassium	3.9	3.0 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 22:47	11/20/01	ENV3P1AM
Magnesium	35.5	0.20 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 22:47	11/20/01	ENV3P1AK
Manganese	2.6	0.010 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 22:47	11/20/01	ENV3P1AL
Sodium	90.6	5.0 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 22:47	11/20/01	ENV3P1AG

Client Sample ID: SK-5D

Lot-Sample # Date Sampled	.: D1K130267-	-010 12:35 Date I	Received	: 11/13/01	Matrix:	WATER
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch # Iron	.: 1319495 1.8	0.10 Dilution Fact	mg/L or: 1	SW846 6010B Analysis Time: 00:35	11/20-11/21/01	ENV3V1AE
Manganese	0.51	0.010 Dilution Fact	mg/L or: 1	SW846 6010B Analysis Time: 00:35	11/20-11/21/01	ENV3V1AF

Client Sample ID: SK-5D

DISSOLVED Metals

Lot-Sample #...: D1K130267-010

Date Sampled...: 11/11/01 12:35 Date Received..: 11/13/01

Matrix.....: WATER

		REPORTI	NG			PREPARATION-	WORK
PARAMETER	RESULT	<u>LIMIT</u>	UNITS	METHOD		ANALYSIS DATE	ORDER #
Prep Batch #	: 1319417						
Calcium	119	0.20	mg/L	SW846 6	5010B	11/20/01	ENV3V1AH
· · · · · · · · · · · · · · · · · · ·	· ·	Dilution Fac	ctor: 1	Analysis T	Time: 22:51		
Iron	ND	0.10	mg/L	SW846 6	5010B	11/20/01	ENV3V1AJ
	Dilution F		ctor: 1	Analysis T	ime: 22:51	, ,	
Potassium	ND	3.0	mg/L	SW846 6	5010B	11/20/01	ENV3V1AM
		Dilution Fac	ctor: 1	Analysis T	ime: 22:51		
Magnesium	49.0	0.20	mg/L	SW846 6	5010B	11/20/01	ENV3V1AK
<i>:</i>	••	Dilution Fac	tor: 1	Analysis T	ime: 22:51		
Manganese	0.42	0.010	mg/L	SW846 6	010B	11/20/01	ENV3VlAL
		Dilution Fac	tor: 1		ime: 22:51		
Sodium	45.7	5.0	mg/L	SW846 6	010B	11/20/01	ENV3V1AG
•	•	Dilution Fac	- ·		ime: 22:51		

Client Sample ID: SK-6S

Lot-Sample #. Date Sampled.	.:: D1K130267		Received.	.: 11/13/01	Matrix:	WATER
		REPORTIN	īG		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #.	.:: 1319495 6.9	0.10	mg/L	SW846 6010B	11/20-11/21/01	ENV3W1AE
		Dilution Fac	tor: I	Analysis Time: 00:38	÷	
Manganese	2.8	0.010	mg/L	SW846 6010B	11/20-11/21/01	ENV3W1AF
		Dilution Fac	cor: 1	Analysis Time: 00:38		

Client Sample ID: SK-6S

DISSOLVED Metals

Lot-Sample #...: D1K130267-011 Matrix....: WATER

Date Sampled...: 11/11/01 07:15 Date Received..: 11/13/01

PARAMETER	RESULT	REPORTIN LIMIT	G UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	: 1319417			:		
Calcium	99.8	0.20 Dilution Fact	mg/L tor: 1	SW846 60 Analysis Tir	11/20/01	ENV3W1AH
Iron	ND ·	0.10 Dilution Fact	mg/L cor: 1	SW846 60 Analysis Tim	11/20/01	ENV3W1AJ
Potassium	ND :	3.0 Dilution Fact	mg/L cor: 1	SW846 60 Analysis Tim	11/20/01	ENV3W1AM
Magnesium	36.3	0.20 Dilution Fact	mg/L	SW846 60 Analysis Tim	11/20/01	ENV3W1AK
Manganese	2.7	0.010 Dilution Fact	mg/L	SW846 60 Analysis Tim	11/20/01	ENV3W1AL
Sodium	82.2	5.0 Dilution Fact	mg/L	SW846 60 Analysis Tim	11/20/01	ENV3W1AG

Client Sample ID: SK-10S

Lot-Sample # Date Sampled	Matrix:	WATER				
		REPORTI	1G		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	: 1319495			•		
Iron	259	0.10	mg/L	SW846 6010B	11/20-11/21/01	ENV3X1AE
		Dilution Fac	tor: 1	Analysis Time: 00:42		
Manganese	9.8	0.010 Dilution Fac	mg/L tor: 1	SW846 6010B Analysis Time: 00:42	11/20-11/21/01	ENV3X1AF

Client Sample ID: SK-10S

DISSOLVED Metals

Lot-Sample #...: D1K130267-012 Matrix....: WATER

Date Sampled...: 11/11/01 14:15 Date Received..: 11/13/01

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	.: 1319417,					
Calcium	92.8	0.20	mg/L	SW846 6010B	11/20/01	ENV3X1AH
		Dilution Fact	or: 1	Analysis Time: 22:59		
Iron	ND	0.10	mg/L	SW846 6010B	11/20/01	ENV3X1AJ
		Dilution Fact	or: 1	Analysis Time: 22:59		
Potassium	3.0	3.0	mg/L	SW846 6010B	11/20/01	ENV3X1AM
	/ •	Dilution Fact	or: 1	Analysis Time: 22:59		
Magnesium	41.3	0.20	mg/L	SW846 6010B	11/20/01	ENV3X1AK
		Dilution Fact	or: 1	Analysis Time: 22:59		
Manganese	2.6	0.010	mg/L	SW846 6010B	11/20/01	ENV3X1AL
_		Dilution Fact		Analysis Time: 22:59	, ,	
Sodium	75.2	. 5.0	mq/L	SW846 6010B	11/20/01	ENV3X1AG
)		Dilution Facto	٥.	Analysis Time: 22:59	,,	

Client Sample ID: SK-25D

Lot-Sample #. Date Sampled.	D1K130267	.: 11/13/01	Matrix:	WATER		
		REPORTI	1G		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #. Iron	: 1319495 0.46	0.10 Dilution Fac	mg/L tor: 1	SW846 6010 B Analysis Time: 00:46	11/20-11/21/01	ENV311AE
Manganese	0.067	0.010 Dilution Fac	mg/L	SW846 6010B Analysis Time: 00:46	11/20-11/21/01	ENV311AF

Client Sample ID: SK-25D

DISSOLVED Metals

Lot-Sample #...: D1K130267-013 Matrix....: WATER

Date Sampled...: 11/11/01 13:00 Date Received..: 11/13/01

				, ,		
PARAMETER	RESULT	REPORTII LIMIT	NG UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #.	• 1319417					
Calcium .	163	0.20	mg/L	SW846 6010B	11/20/01	IDDE: 1 1 2 11
	r	Dilution Fac	_	Analysis Time: 23:03		ENV311AH
Iron	ND	0.10	mg/L	SW846 6010B	11/20/01	ENV311AJ
		Dilution Fac	tor: 1	Analysis Time: 23:03		
Potassium	ND	3.0	mg/L	SW846 6010B	11/20/01	ENV311AM
		Dilution Fac	tor: 1	Analysis Time: 23:03		
Magnesium	63.9	0.20	mg/L	SW846 6010B	11/20/01	ENV311AK
		Dilution Fac	tor: 1	Analysis Time: 23:03		
Manganese	0.055	0.010	mg/L	SW846 6010B	11/20/01	ENV311AL
		Dilution Fac	tor: 1	Analysis Time: 23:03		
Sodium	45.6	5.0	mg/L	SW846 6010B	11/20/01	ENV311AG
		Dilution Fac	tor: 1	Analysis Time: 23:03		

Client Sample ID: SK-26S

Lot-Sample #. Date Sampled.	Matrix:	WATER				
		REPORTIN	īG		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER # ·
Prep Batch #.		0.10	ma /T	SW846 6010B	11/20-11/21/01	EN17241 NE
Iron	430	0.10	mg/L		11/20-11/21/01	EMA24TWE
		Dilution Fac	tor: 1	Analysis Time: 00:50		
Manganese	12.2	0.010	mg/L	SW846 6010B	11/20-11/21/01	ENV341ÄF
•		Dilution Fac	tor: 1	Analysis Time: 00:50		

Client Sample ID: SK-26S

DISSOLVED Metals

Lot-Sample #...: D1K130267-014 Matrix....: WATER

Date Sampled...: 11/11/01 13:30 Date Received..: 11/13/01

-				,, . –		
PARAMETER	RESULT	REPORTII LIMIT	NG UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Dron Dotah #	1210439					
Prep Batch #		٤				
Calcium	94.8	0.20	mg/L	SW846 6010B	11/20/01	ENV341AH
		Dilution Fac	tor: 1	Analysis Time: 23	3:07	
		1				
Iron	ND	0.10	mg/L	SW846 6010B	11/20/01	ENV341AJ
		Dilution Fac	tor: 1	Analysis Time: 23	3:07	
Potassium	3.4	3.0	mg/L	SW846 6010B	11/20/01	ENV341AM
	<i>:</i>	Dilution Fac	tor: 1	Analysis Time: 23		
Magnesium	42.1	0.20	mg/L	SW846 6010B	11/20/01	ENV341AK
		Dilution Fac	-	Analysis Time: 23		
Manganese	2.7	0.010	mg/L	SW846 6010B	11/20/01	ENV341AL
3		Dilution Fac	- '	Analysis Time: 23	• •	EWA24TED
						,
Sodium	77.4	5.0	mg/L	SW846 6010B	11/20/01	ENV341AG
7		Dilution Fac	tor: 1	Analysis Time: 23	:07	

Client Sample ID: SK-27S

Lot-Sample # Date Sampled	· ·	Matrix:	WATER			
		REPORTI	1G	· ·	PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #. Iron	: 1319495 11.6	0.10	mg/L	SW846 6010B	11/20-11/21/01	ENV371AE
		Dilution Fac	tor: 1	Analysis Time: 00:54	,,,	
Manganese	1.0	0.010	mg/L	SW846 6010B	11/20-11/21/01	ENV371AF

Client Sample ID: SK-27S

DISSOLVED Metals

Lot-Sample #...: D1K130267-015 . Matrix.....: WATER

Date Sampled...: 11/11/01 14:00 Date Received..: 11/13/01

						•	
		REPORTIN	1G			PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHO	D	ANALYSIS DATE	ORDER #
	:						
Prep Batch #.	: 1319417						
Calcium	102	0.20	mg/L	SW846	6010B	11/20/01	ENV371AH
		Dilution Fac	tor: 1	Analysis Ti	Time: 23:10		
		•					
Iron	ND	0.10	mg/L	SW846	6010B	11/20/01	ENV371AJ
	*4.	Dilution Factor: 1		Analysis Time: 23:10			•
	•						
Potassium	3.9	3.0	mg/L	SW846	6010B	11/20/01	ENV371AM
		Dilution Factor: 1		Analysis Time: 23:10			
Magnesium	35.8	0.20	mg/L	SW846	6010B	11/20/01	ENV371AK
	Z . a	Dilution Fac	_	Analysis	Time: 23:10	•	
Manganese	0.94	0.010	mg/L	SW846	6010B	11/20/01	ENV371AL
	-	Dilution Fac	- -		Time: 23:10		
Sodium	47.8	5.0	mg/L	CWO A C	6010B	11/20/01	ENV371AG
	±7.0	Dilution Fac	- ·			11/20/01	DIA 1 LANG
		Dilucion Lac	COT: T	Analysis	Time: 23:10		

Client Sample ID: SK-28S

TOTAL Metals

Lot-Sample # Date Sampled	Matrix:	WATER				
	•	REPORTIN	īG		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch # Iron	: 1319495 77.6	0.10	mg/L	SW846 6010B	11/20-11/21/01	ENV4G1AE
		Dilution Fac	tor: 1	Analysis Time: 01:05		
Manganese	1.4	0.010 Dilution Fac	mg/L tor: 1	SW846 6010B Analysis Time: 01:05	11/20-11/21/01	ENV4G1AF

Client Sample ID: SK-28S

DISSOLVED Metals

Lot-Sample #...: D1K130267-018 Matrix....: WATER

Date Sampled...: 11/11/01 14:30 Date Received..: 11/13/01

PARAMETER	RESULT	REPORTING LIMIT UN	ITS METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #.	: 1319417				
Calcium	132	0.20 mg Dilution Factor:		11/20/01	ENV4G1AH
Iron	1.9	0.10 mg		11/20/01	ENV4G1AJ
Potassium	3.4	3.0 mg		11/20/01	ENV4G1AM
Magnesium	16.7	0.20 mg Dilution Factor: 1		11/20/01	ENV4G1AK
Manganese	0.78	0.010 mg, Dilution Factor: 1		11/20/01	ENV4G1AL
Sodium	23.2	5.0 mg, Dilution Factor: 1	·	11/20/01	ENV4G1AG

Client Sample ID: SK-1S

General Chemistry

Lot-Sample #...: D1K130267-001 Work Order #...: ENV29 Matrix.....: WATER

Date Sampled...: 11/11/01 08:15 Date Received..: 11/13/01

PARAMETER	RESULT	RL ,	UNITS	METHOI)	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND	0.10		MCAWW	350.1	11/14/01	1319320
		Dilution Fact	•	Analysis	Time: 08:00		
Bicarbonate Alkalinity	260	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
-		Dilution Fact	tor: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW	310.1	11/19/01	1323549
•		Dilution Fact	tor: 1	Analysis	Time: 14:00		
Chloride	55.5	2.5	mg/L	MCAWW	325.2	11/16/01	1324257
		Dilution Fact	tor: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	1.7	0.10	mg/L	MCAWW	353.2	11/14/01	1319419
		Dilution Fact	tor: 1	Analysis	Time: 08:00		
Sulfate	315 Q	50.0	mg/L	MCAWW	375.4	11/26/01	13306
		Dilution Fact	tor: 10	Analysis	Time: 12:30		
Total Alkalinity	260	5.0	mg/L	MCAWW	310.1	11/19/01	1323547
-		Dilution Fact	tor: 1	Analysis	Time: 14:00		
Total Dissolved Solids	1040 G	20.0	mg/L	MCAWW	160.1	11/15/01	1319625
		Dilution Fact	tor: 2	Analysis	Time: 12:00		
Total Organic Carbon	1.9	1.0	mg/L	MCAWW	415.1	11/22-11/23/01	1330527
		Dilution Fact	tor: 1	Analysis	Time: 04:00		

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: SK-1D.

General Chemistry

Lot-Sample #...: D1K130267-002 Work Order #...: ENV3E Matrix..... WATER Date Sampled...: 11/11/01 07:45 Date Received..: 11/13/01

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND	0.10	mg/L	MCAWW 350.1	11/14/01	1319320
		Dilution Fac		Analysis Time: 08:0		1319320
Bicarbonate Alkalinity	269	5.0	mg/L	MCAWW 310.1	11/19/01	1323548
		Dilution Fac	tor: 1	Analysis Time: 14:0	0	ar.
Carbonate Alkalinity	ND		mg/L	MCAWW 310.1	11/19/01	1323549
		Dilution Fac	tor: 1	Analysis Time: 14:0	0	
Chloride	50.6	2.5	mg/L	MCAWW 325.2	11/16/01	1324257
		Dilution Fac	tor: 1	Analysis Time: 13:0		1321237
Nitrate-Nitrite	1.7	0.10	mg/L	MCAWW 353.2	11/14/01	1319419
		Dilution Fact	tor: 1	Analysis Time: 08:0	0	
Sulfate	443 Q	50.0	mg/L	MCAWW 375.4	11/26/01	1330633
	4	Dilution Fact	or: 10	Analysis Time: 12:30		
Total Alkalinity	269	5.0	mg/L	MCAWW 310.1	11/19/01	1323547
		Dilution Fact	or: 1	Analysis Time: 14:00)	
Total Dissolved Solids	1000	10.0	mg/L	MCAWW 160.1	11/15/01	1319625
		Dilution Fact	or: 1	Analysis Time: 12:00		•
Total Organic Carbon	3.5	1.0	mg/L	MCAWW 415.1	11/22-11/23/01	1220527
		Dilution Fact	_	Analysis Time: 04:00	/22 11/23/01	1330327
NOTE(S):	.*				*	

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Client Sample ID: SK-2S

General Chemistry

Lot-Sample #...: D1K130267-003 Work Order #...: ENV3F Matrix.....: WATER

Date Sampled...: 11/11/01 11:00 Date Received..: 11/13/01

PARAMETER	RESULT	RL	UNITS	METHO:	, D	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	0.13	0.10	mg/L	MCAWW	350.1	11/14/01	1319320
		Dilution Facto	or: 1	Analysis	Time: 08:00	•	•
Bicarbonate Alkalinity	423	5.0	mg/L .	MCAWW	310.1	11/19/01	1323548
- ·		Dilution Facto	or: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	ND .	5.0	mg/L	MCAWW	310.1	11/19/01	1323549
		Dilution Facto	or: 1	Analysis	Time: 14:00		
Chloride	80.8	2.5	mg/L	MCAWW	325.2	11/16/01	1324257
•		Dilution Facto	or: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	ND	0.10	mg/L	MCAWW	353.2	11/14/01	1319419
		Dilution Facto	or: 1	Analysis	Time: 08:00		
Sulfate	132 Q	25.0	mg/L	MCAWW	375.4	11/26/01	133063
		Dilution Facto	or: 5	Analysis	Time: 12:30		
Total Alkalinity	423	5.0	mg/L	MCAWW	310.1	11/19/01	1323547
		Dilution Facto	or: 1	Analysis	Time: 14:00	4	
Total Dissolved Solids	825 G	50.0	mg/L	MCAWW	160.1	11/15/01	1319625
		Dilution Facto	or: 5	Analysis	Time: 12:00		
Total Organic Carbon	5.2	1.0 Dilution Facto	mg/L		415.1 Time: 04:00	11/22-11/23/01	1330527
		Dilucion racto			11		

RL Reporting Limit

Q , Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: SK-2D

General Chemistry

Lot-Sample #...: D1K130267-004 Work Order #...: ENV3G Matrix.....: WATER

Date Sampled...: 11/11/01 11:30 Date Received..: 11/13/01

PARAMETER	RESULT	RL	UNITS	METHO	D	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND	0.10	mg/L		350.1	11/14/01	1319320
		Dilution Fac	tor: 1	Analysis	Time: 08:00		
Bicarbonate Alkalinity	347	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
		Dilution Fac	tor: 1	Analysis	Time: 14:00		•
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW	310.1	11/19/01	1323549
		Dilution Fac			Time: 14:00	22/23/02	1323313
Chloride	56.0	2.5	mg/L	мслиш	325.2	11/16/01	1324257
	30.0	Dilution Fac	_		Time: 13:00	11/10/01	1324237
372 Lucia La 1871 11	,			·			
Nitrate-Nitrite	3.3	0.10 Dilution Fac	mg/L tor: 1		353.2 Time: 08:00	11/14/01	1319419
_				121027020	12		
Sulfate	287 Q	50.0	mg/L	MCAWW	375.4	11/26/01	1330633
		Dilution Fac	tor: 10	Analysis	Time: 12:30		
Total Alkalinity	347	5.0	mg/L	MCAWW	310.1	11/19/01 .	1323547
		Dilution Fac	tor: 1	Analysis	Time: 14:00	•	•
Total Dissolved Solids	895	10.0	mg/L	MCAWW	160.1	11/15/01	1319625
· ·		Dilution Fact	tor: 1	Analysis	Time: 12:00		
Total Organic Carbon	16 9	1.0	mq/L	МСУМИ	415.1	11/22-11/23/01	1220527
		Dilution Fact	٥.	-	Time: 05:00	11/22-11/23/01	1330321
	•		•				

 $[\]boldsymbol{Q}$ $\;$ Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Client Sample ID: SK-3S

General Chemistry

Lot-Sample #...: D1K130267-005 Work Order #...: ENV3H Matrix.....: WATER

Date Sampled...: 11/11/01 10:05 Date Received..: 11/13/01

						PREPARATION-	PREP
PARAMETER	RESULT	RL_	UNITS	METHO	D	ANALYSIS DATE	BATCH #
Ammonia as N	ND	0.10	mg/L	MCAWW	350.1	11/14/01	1319320
		Dilution Fact	or: 1	Analysis	Time: 08:00		
			•				
Bicarbonate	282	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
Alkalinity							
		Dilution Facto	or: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	NID	5.0	mor /T.	MCALITY	310.1	11/19/01	1323549
carbonace Arkarinity	MD	Dilution Facto	•		Time: 14:00	11/19/01	1323549
		Dilucion Facto	JI: I	Anarysis	11me: 14:00		
Chloride	53.4	2.5	mq/L	MCAWW	325.2	11/16/01	1324257
		Dilution Facto			Time: 13:00		2021237
				-			
Nitrate-Nitrite	5.8	0.10	mg/L	MCAWW	353.2	11/14/01	1319419
		Dilution Facto	or: 1	Analysis	Time: 08:00		ar.
Sulfate	167 Q	25.0	mg/L	MCAWW	375.4	11/26/01	13306
		Dilution Facto	or: 5	Analysis	Time: 12:30		
			:				
Total Alkalinity	282	5.0	mg/L		310.1	11/19/01	1323547
		Dilution Facto	or: 1	Analysis	Time: 14:00		
Total Dissolved	1000 G		. /-				
Solids	T000 G	50.0	mg/L	MCAWW	160.1	11/15/01	1319625
SOTIUS		Dilution Facto	·	3	m: 10 00		
		Dilucion Facet)[: 5	Analysis	Time: 12:00		•
Total Organic Carbon	5.9	1.0	mq/L	MCAWW	415.1	11/22-11/23/01	1330527
		Dilution Facto	-		Time: 05:00	,,	200027
				,			

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: SK-3D

General Chemistry

Lot-Sample #...: D1K130267-006 Work Order #...: ENV3L Matrix..... WATE

Date Sampled...: 11/11/01 10:35 Date Received..: 11/13/01

						PREPARATION-	PREP
PARAMETER	RESULT	RL	UNITS	METHO	<u>'</u>	ANALYSIS DATE	BATCH #
Ammonia as N	ND	0.10	mg/L		350.1	11/14/01	1319320
		Dilution Fact	or: 1	Analysis	Time: 08:00		
Bicarbonate Alkalinity	285	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
-	•	Dilution Fact	or: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW	310.1	11/19/01	1323549
•	*	Dilution Fact	or: 1	Analysis	Time: 14:00		
Chloride	52.0	2.5	mg/L	MCAWW	325.2	11/16/01	1324257
		Dilution Fact	or: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	5.1	0.10	mg/L	MCAWW	353.2	11/14/01	1319419
	, *	Dilution Fact	or: 1	Analysis	Time: 08:00		
Sulfate	189 Q	50.0	mg/L	MCAWW	375.4	11/26/01	1330633
		Dilution Fact	or: 10	Analysis	Time: 12:30		
Total Alkalinity	285	5.0	mg/L	MCAWW	310.1	11/19/01	1323547
		Dilution Fact	ilution Factor: 1		Time: 14:00		
Total Dissolved Solids	649	10.0	mg/L	MCAWW	160.1	11/15/01	1319625
		Dilution Fact	or: 1	Analysis	Time: 12:00		
Matal Owner's Garban	20.0	1.0	/T	MORETA	475 7	77/22 77/22/27	1220527
Total Organic Carbon	∠0.0	1.0 Dilution Fact	mg/L or: 1		415.1 Time: 05:00	11/22-11/23/01	1330527
	•		-	,		•	

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Client Sample ID: SK-4S

General Chemistry

Lot-Sample #...: D1K130267-007 Work Order #...: ENV3M Matrix.....: WATER

Date Sampled...: 11/11/01 09:40 Date Received..: 11/13/01

PARAMETER	RESULT	RL	UNITS	METHO	D	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND	0.10	mg/L	MCAWW	350.1 -	11/14/01	1319320
		Dilution Fact	or: 1	Analysis	Time: 08:00		
Bicarbonate Alkalinity	386	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
		Dilution Facto	Dilution Factor: 1		Time: 14:00		
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW	310.1	11/19/01	1323549
		Dilution Facto	or: 1	Analysis	Time: 14:00		
Chloride	36.9	2.5	mg/L	MCAWW	325.2	11/16/01	1324257
		Dilution Facto	or: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	1.3	0.10	mg/L	MCAWW	353.2	11/14/01	1319419
		Dilution Facto	or: 1	Analysis	Time: 08:00		
Sulfate	190 Q	50.0	mg/L	MCAWW	375.4	11/26/01	13306
		Dilution Facto		Analysis	Time: 12:30	, ,	
Total Alkalinity	386	5.0	mq/L	MCAWW	310.1	11/19/01	1323547
-		Dilution Facto	J		Time: 14:00	22, 23, 61	1323347
Total Dissolved Solids	1030 G	100	mg/L	MCAWW	160.1	11/15/01	1319625
		Dilution Facto	or: 10	Analysis	Time: 12:00	•	
Total Organic Carbon	2.9	1.0 Dilution Facto	mg/L or: 1	MCAWW Analysis	415.1 Time: 05:00	11/22-11/23/01	1330531

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: SK-4D

General Chemistry

Lot-Sample #...: D1K130267-008 Work Order #...: ENV3N Matrix.....: WATER

Date Sampled...: 11/11/01 15:15 Date Received..: 11/13/01

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND.	0.10	mg/L	MCAWW 350.1	11/14/01	1319320
		Dilution Fact	or: 1	Analysis Time: 08:0	0	
Bicarbonate Alkalinity	338	5.0	mg/L	MCAWW 310.1	11/19/01	1323548
		Dilution Fact	or: 1	Analysis Time: 14:0	0	
Carbonate Alkalinity	NTO	5.0	mg/L	MCAWW 310.1	11/19/01	1323549
Carbonate Arkarinity	ND.	Dilution Fact		Analysis Time: 14:0	• •	1323349
			_			
Chloride	65.1	2.5	mg/L	MCAWW 325.2	11/16/01	1324257
3 .		Dilution Facto	or: 1	Analysis Time: 13:0)	
Nitrate-Nitrite	3.1	0.10	mg/L	MCAWW 353.2	11/14/01	1319419
¥		Dilution Facto		Analysis Time: 08:0	• •	
Sulfate	190 0	50.0	mq/L	MCAWW 375.4	11/26/01	1330633
Surrace	100 Q	Dilution Facto	٥.	Analysis Time: 12:30		1330033
	**	Dilucion race	JI. 10	Andrysis iime 12.5	,	
Total Alkalinity	338	5.0	mg/L	MCAWW 310.1	11/19/01	1323547
	•	Dilution Facto	or: 1	Analysis Time: 14:00)	
Total Dissolved Solids	767	10.0	mg/L	MCAWW 160.1	11/15/01	1319625
•	A I	Dilution Facto	or: 1	Analysis Time: 12:00)	
Total Organic Carbon	4.2	1.0	mq/L	MCAWW 415.1	11/22-11/23/01	1330531
_		Dilution Facto	J.	Analysis Time: 05:00	•	-
	r			-		

NOTE(S):

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Client Sample ID: SK-5S

General Chemistry

Lot-Sample #...: D1K130267-009 Work Order #...: ENV3P Matrix.....: WATER

Date Sampled...: 11/11/01 12:05 Date Received..: 11/13/01

	•					PREPARATION-	PREP
PARAMETER	RESULT	RL RL	UNITS	METHO	DD	ANALYSIS DATE	BATCH #
Ammonia as N	0.24	0.10	mg/L	MCAWW	350.1	11/14/01	1319320
		Dilution Fact			Time: 08:00	11/14/01	1319320
				11101751	J 11		
Bicarbonate Alkalinity	481	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
·		Dilution Fact	tor: 1	Analysis	Time: 14:00		
g					4		
Carbonate Alkalinity	ND	5.0	mg/L		310.1	11/19/01	1323549
		Dilution Fact	or: 1	Analysis	Time: 14:00		
Chloride	115	2.5	mg/L	MCAWW	325.2	11/16/01	1204055
		Dilution Fact	٥.		Time: 13:00	11/10/01	1324257
		Dilucion race	.01. 1	Analysis	: IIme: 13:00		
Nitrate-Nitrite	ND	0.10	mg/L	MCAWW	353.2	11/14/01	1319419
		Dilution Fact	or: 1	Analysis	Time: 08:00		
-				-		•	
Sulfate	68.0 Q	10.0	mg/L	MCAWW	375.4	11/26/01	133063
		Dilution Fact	or: 2	Analysis	Time: 12:30		
				_			
Total Alkalinity	481	5.0	mg/L	MCAWW	310.1	11/19/01	1323547
		Dilution Fact	or: 1	Analysis	Time: 14:00	, .,	
Total Dissolved Solids	910 G	50.0	mg/L	MCAWW	160.1	11/15/01	1319625
,		Dilution Fact	or: 5	Analysis	Time: 12:00	, ·	
Total Organic Carbon	4 6	1.0	mg/L	MCAWW	415 1	11/20 11/22/	
	1.0	Dilution Facto	-			11/22-11/23/01	1330531
•		DITUCTON FACT	OT: T	Analysis	Time: 06:00		
NOTE(S):							

NOTE(S):

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: SK-5D

General Chemistry

Matrix....: WATER

Lot-Sample #...: D1K130267-010 Work Order #...: ENV3V

Date Sampled...: 11/11/01 12:35 Date Received..: 11/13/01

PARAMETER	RESULT	RL	UNITS	METHO	ם	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND	0.10 Dilution Fac	mg/L tor: 1		350.1 Time: 08:00	11/14/01	1319320
Bicarbonate Alkalinity	318	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
		Dilution Fact	cor: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	ND	5.0	mg/L		310.1	11/19/01	1323549
		Dilution Fact	or: 1	Analysis	Time: 14:00		
Chloride	74.4	2.5	mg/L		325.2	11/16/01	1324257
		Dilution Fact	cor: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	3.6	0.10	mg/L		353.2	11/14/01	1319419
		Dilution Fact	or: 1 .	Analysis	Time: 08:00		
Sulfate	234 Q	50.0 Dilution Fact	mg/L	•	375.4	11/26/01	1330633
		Dilucion Fact	.01: 10	Analysis	Time: 12:30		
Total Alkalinity	318	5.0	mg/L		310.1	11/19/01	1323547
, , , , , , , , , , , , , , , , , , ,		Dilution Fact	or: 1	Analysis	Time: 14:00		
Total Dissolved Solids	770	10.0	mg/L	MCAWW	160.1	11/15/01	1319625
		Dilution Fact	or: 1	Analysis	Time: 12:00		
Total Organic Carbon	18.9	1.0	mg/L	MCAWW	415.1	11/22-11/23/01	1330531
	•	Dilution Fact	or: 1	Analysis	Time: 06:00		
NOTE(S):							

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Client Sample ID: SK-6S

General Chemistry

Lot-Sample #...: D1K130267-011 Work Order #...: ENV3W Matrix....: WATER

Date Sampled...: 11/11/01 07:15 Date Received..: 11/13/01

PARAMETER	RESULT	RL	UNITS	METHO	D	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND	0.10	mg/L		350.1	11/14/01	1319320
		Dilution Facto	r: 1	Analysis	Time: 08:00		
Bicarbonate Alkalinity	410	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
		Dilution Facto	r: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	ND .	5.0	mg/L		310.1	11/19/01	1323549
		Dilution Facto	r: 1	Analysis	Time: 14:00		
Chloride	56.1	2.5	mg/Ĺ	MCAWW	325.2	11/16/01	1324257
		Dilution Facto	r: 1	Analysis	Time: 13:00		P
Nitrate-Nitrite	ND	0.10	mg/L	MCAWW	353.2	11/14/01	1319419
		Dilution Facto	r: 1	Analysis	Time: 08:00		
Sulfate	93.2 0	10.0	mg/L	мсашы	375.4	11/26/01	133063
Surrace	-	Dilution Facto			Time: 12:30	11/20/01	133003
		•		•			
Total Alkalinity	410	5.0	mg/L	MCAWW	310.1	11/19/01	1323547
	:	Dilution Facto	r: 1	Analysis	Time: 14:00		
Total Dissolved	1400 G	50.0	mg/L	MCAWW	160.1	11/15/01	1319625
		Dilution Facto	r: 5	Analysis	Time: 12:00		
Total Organic Carbon	2.9	1.0	mg/L	MCAWW	415.1	11/22-11/23/01	1330531
	:	Dilution Facto	r: 1	Analysis	Time: 06:00		

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: SK-10S

General Chemistry

Lot-Sample #...: D1K130267-012 Work Order #...: ENV3X Matrix.....: WATER

Date Sampled...: 11/11/01 14:15 Date Received..: 11/13/01

	*.				•	PREPARATION-	PREP
PARAMETER	RESULT	RL RL	<u>UNITS</u>	METHO	D	ANALYSIS DATE	BATCH #
Ammonia as N	0.39	0.10	mg/L	MCAWW	350.1	11/14/01	1319320
		Dilution Facto	or: 1	Analysis	Time: 08:00		
Bicarbonate Alkalinity	338 .	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
		Dilution Facto	or: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW	310.1	11/19/01	1323549
		Dilution Facto	or: 1	Analysis	Time: 14:00		
Chloride	80.5	2.5	mg/L	MCAWW	325.2	11/16/01	1324257
	:	Dilution Facto	or: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	0.35	0.10	mg/L	MCAWW	353.2	11/14/01	1319419
		Dilution Facto	or: 1	Analysis	Time: 08:00		
Sulfate	142 Q	25.0	mg/L	MCAWW	375.4	11/26/01	1330633
		Dilution Facto	or: 5	Analysis	Time: 12:30		
Total Alkalinity	338	. 5.0	mg/L	MCAWW	310.1	11/19/01	1323547
- -		Dilution Facto	or: 1	Analysis	Time: 14:00		
Total Dissolved Solids	680 G	100	mg/L	MCAWW	160.1	11/15/01	1319625
		Dilution Facto	or: 10	Analysis	Time: 12:00		
Total Organic Carbon	4.6	1.0	mq/L	MCAWW	415.1	11/22-11/23/01	1330531
*.		Dilution Facto	or: 1	Analysis	Time: 06:00	•	

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: SK-25D

General Chemistry

Lot-Sample #...: D1K130267-013 Work Order #...: ENV31 Matrix.....: WATER

Date Sampled...: 11/11/01 13:00 Date Received..: 11/13/01

PARAMETER	RESULT	RL	UNITS	METHO) 	PREPARATION - ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND	0.10 Dilution Facto	mg/L or: 1		350.1 Time: 08:00	11/14/01	1319320
Bicarbonate Alkalinity	270	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
		Dilution Facto	or: 1	Analysis	Time: 14:00		*
Carbonate Alkalinity	ND	5.0 Dilution Facto	mg/L		310.1 Time: 14:00	11/19/01 .	1323549
		Dilucion Faced	or: T	Allalysis	11me: 14:00	•	
Chloride	50.9	2.5	mg/L	MCAWW	325.2	11/16/01	1324257
		Dilution Facto	or: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	1.7	0.10	mg/L		353.2 Time: 08:00	11/14/01	1319419
		Direction racte		Alutysts	111110 00.00	•	
Sulfate	419 Q	50.0	mg/L	MCAWW	375.4	11/26/01	13306
		Dilution Facto	r: 10	Analysis	Time: 12:30		
Total Alkalinity	270	5.0	mg/L		310.1	11/19/01	1323547
		Dilution Facto	r: 1	Analysis	Time: 14:00	•	
Total Dissolved Solids	994	10.0	mg/L	MCAWW	160.1	11/15/01	1319625
•		Dilution Facto	r: 1	Analysis	Time: 12:00		
Total Organic Carbon	4.0	1.0 Dilution Facto	mg/L		415.1 Time: 07:00	11/22-11/23/01	1330531
						•	

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Client Sample ID: SK-26S

General Chemistry

Lot-Sample #...: D1K130267-014 Work Order #...: ENV34 Matrix....: WATER

Date Sampled...: 11/11/01 13:30 Date Received..: 11/13/01

				,	•	PREPARATION-	PREP
PARAMETER	RESULT	<u>RL</u>	UNITS	METHO	D	ANALYSIS DATE	BATCH #
Ammonia as N	0.44	0.10	mg/L	MCAWW	350.1	11/14/01	1319320
		Dilution Fa	ctor: 1	Analysis	Time: 08:00		
Bicarbonate Alkalinity	332	5.0	mg/L	MCAWW	310.1	11/19/01	1323553
		Dilution Fa	ctor: 1	Analysis	Time: 18:00		
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW	310.1	11/19/01	1323554
		Dilution Fa	ctor: 1	Analysis	Time: 18:00		
Chloride	80.2	2.5	mg/L	MCAWW	325.2	11/16/01	1324257
	•	Dilution Fa	ctor: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	0.42	0.10	mg/L		353.2	11/14/01	1319419
		Dilution Fa	ctor: 1	Analysis	Time: 08:00		
Sulfate	160 Q	25.0	mg/L	MCAWW	375.4	11/26/01	1330633
		Dilution Fa	ctor: 5	Analysis	Time: 12:30		
Total Alkalinity	332	5.0	mg/L	MCAWW	310.1	11/19/01	1323550
		Dilution Fa	ctor: 1	Analysis	Time: 18:00	•	
Total Dissolved Solids	840 G	100	mg/L	MCAWW	160.1	11/15/01	1319625
	•	Dilution Fa	ctor: 10	Analysis	Time: 12:00		•
Total Organic Carbon	5.4	1.0	mg/L	MCAWW	415.1	11/22-11/23/01	1330531
	•	Dilution Fa	ctor: 1	Analysis	Time: 07:00		

RL Reporting Limit

 $[\]boldsymbol{Q}$ $\;$ Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: SK-27S

General Chemistry

Lot-Sample #...: D1K130267-015 Work Order #...: ENV37 Matrix.....: WATER

Date Sampled...: 11/11/01 14:00 Date Received..: 11/13/01

	•	ч				PREPARATION-	PREP
PARAMETER	RESULT	RL	UNITS	METHOI)	ANALYSIS DATE	BATCH #
Ammonia as N	ND	0.10	mg/L	MCAWW		11/14/01	1319320
		Dilution Fact	or: 1	Analysis	Time: 08:00		
Bicarbonate Alkalinity	277	5.0	mg/L	MCAWW	310.1	11/19/01	1323553
		Dilution Fact	or: 1	Analysis	Time: 18:00		
Carbonate Alkalinity	ND	5.0	mg/L		310.1	11/19/01	1323554
		Dilution Fact	or: 1	Analysis	Time: 18:00		
Chloride	57.8	2.5	mg/L	MCAWW		11/16/01	1324257
		Dilution Fact	or: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	5.9	0.10	mg/L		353.2	11/14/01	1319419
		Dilution Fact	or: 1	Analysis	Time: 08:00		
Sulfate	138 Q	25.0	mg/L	MCAWW		11/26/01	13306
		Dilution Fact	or: 5	Analysis	Time: 12:30		
Total Alkalinity	277	5.0	mg/L	MCAWW		11/19/01	1323550
		Dilution Fact	or: 1	Analysis	Time: 18:00		
Total Dissolved Solids	666 G	20.0	mg/L	MCAWW	160.1	11/15/01	1319625
		Dilution Fact	or: 2	Analysis	Time: 12:00	•	
Total Organic Carbon	2.8	1.0	mg/L	MCAWW	415.1	11/22-11/23/01	1330531
,		Dilution Fact	or: 1	Analysis	Time: 07:00		

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: SK-28S

General Chemistry

Lot-Sample #...: D1K130267-018 Work Order #...: ENV4G Matrix....: WATER

Date Sampled...: 11/11/01 14:30 Date Received..: 11/13/01

PARAMETER	RESULT	RL	UNITS	<u>METHOI</u>)	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	0.15	0.10 Dilution Fact	mg/L or: 1	•	350.1 Time: 08:00	11/14/01	1319320
Bicarbonate Alkalinity	263	5.0	mg/L	MCAWW	310.1	11/20/01	1325373
	**	Dilution Fact	or: 1	Analysis	Time: 16:00		
Carbonate Alkalinity	ND	. 5.0	mg/L	MCAWW	310.1	11/20/01	1325374
	•	Dilution Fact	or: 1	Analysis	Time: 16:00		
Chloride	12.1	2.5	mg/L		325.2	11/16/01	1324257
		Dilution Facto	or: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	0.45	0.10	mg/L		353.2	11/14/01	1319419
_		Dilution Facto	or: 1	Analysis	Time: 08:00		
Sulfate	164 Q	25.0	mg/L		375.4	11/26/01	1330633
		Dilution Facto	or: 5	Analysis	Time: 12:30		
Total Alkalinity	263.	5.0	mg/L		310.1	11/20/01	1325372
		Dilution Facto	or: 1	Analysis	Time: 16:00		
Total Dissolved Solids	655 G	50.0	mg/L	MCAWW	160.1	11/15/01	1319625
DOTTUS		Dilution Facto	or: 5	Analysis	Time: 12:00		
Total Organic Carbon	3.5	1.0	mg/L	MCAWW		11/22-11/23/01	1330531
i,		Dilution Facto	or: 1	Analysis	Time: 18:00		*

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

D1K130267

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
		· · · · · · · · · · · · · · · · · · ·		2112 011	110 100111
001	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1	•	1323549	
	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2	•	1319419	1319201
	WATER	MCAWW 415.1		1330527	1330240
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B		1324409	1324190
	WATER	SW846 6010B	•	1319417,	1319196
	WATER	SW846 6010B		1319495	1319249
	WATER	MCAWW 375.4		1330633	1330321
	WATER	MCAWW 310.1	*	1323548	
	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1 '		1319320	1319131
			•		•
002	WATER	MCAWW 160.1		1319625	`1324239
	WATER	MCAWW 310.1		1323549	
•	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
	WATER	MCAWW 415.1		1330527	1330240
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B		1324409	1324190
	WATER	SW846 6010B		1319417	1319196
	WATER	SW846 6010B		1319495	1319249
	WATER	MCAWW 375.4		1330633	1330321
	WATER	MCAWW 310.1		1323548	
•	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1		1319320	1319131
					•
003	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2	,	1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
	WATER	MCAWW 415.1		1330527	1330240
	WATER	RSK SOP-175	·	1332454	1332246
	WATER	SW846 8260B		1324409	1324190
	WATER	SW846 6010B		1319417	1319196
	WATER	SW846 6010B		1319495	1319249
	WATER	MCAWW 375.4		1330633	1330321
	WATER	MCAWW 310.1		1323548	•
	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1	•	1319320	1319131

D1K130267

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
004	WATÉR	MCAWW 160.1	2	1319625	1324239
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
	WATER	MCAWW 415.1		1330527	1330240
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B		1324409	1324190
	WATER 📑	SW846 6010B	•	1319417	1319196
	WATER	SW846 6010B		1319495	1319249
	WATER	MCAWW 375.4		1330633	1330321
	WATER	MCAWW 310.1		1323548	
	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1		1319320	1319131
005	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1		1323549	•
	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
	WATER	MCAWW 415.1	•	1330527	1330240
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B		1324409	1324190
	WATER	SW846 6010B		1319417	1319196
	WATER	SW846 6010B	•	1319495	1319249
	WATER	MCAWW 375.4		1330633	1330321
	WATER	MCAWW 310.1		1323548	
	WATER	MCAWW 310.1	ś	1323547	1323314
	WATER	MCAWW 350.1		1319320	1319131
	 =				
006	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1		1323549	
•	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
•	WATER	MCAWW 415.1	,	1330527	1330240
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B		1325275	1325115
	WATER	SW846 6010B		1319417	1319196
	WATER	SW846 6010B		1319495	1319249
	WATER	MCAWW 375.4		1330633	1330321
•	WATER	MCAWW 310.1		1323548	
P	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1		1319320	1319131

D1K130267

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
					
007	WATER	MCAWW 160.1	*	1319625	1324239
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
	WATER	MCAWW 415.1		1330531	1330241
	WATER	RSK SOP-175		1332454	1332246
*	WATER	SW846 8260B		1324409	1324190
	WATER .	SW846 6010B		1319417	1319196
	WATER	SW846 6010B		1319495	1319249
•	WATER	MCAWW 375.4	. •	1330633	1330321
•	WATER	MCAWW 310.1		1323548	
	WATER	MCAWW 310.1		1323547	1323314
•	WATER	MCAWW 350.1		1319320	1319131
			•		
800	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
,	WATER	MCAWW 415.1		1330531	1330241
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B	•	1325275	1325115
	WATER	SW846 6010B		1319417	1319196
	WATER ·	SW846 6010B		1319495	1319249
	WATER	MCAWW 375.4		1330633	1330321
	WATER	MCAWW 310.1		1323548	
•	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1		1319320	1319131
009	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
	WATER	MCAWW 415.1		1330531	1330241
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B		1324409	1324190
	WATER	SW846 6010B		1319417	1319196
	WATER	SW846 6010B	*	1319495	1319249
	WATER	MCAWW 375.4		1330633	1330321
	WATER	MCAWW 310.1		1323548	
	WATER	'MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1	•	1319320	1319131
		•			

D1K130267

Sample Preparation and Analysis Control Numbers

	á	ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
	-		•		
010	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2	e de la companya de l	1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
	WATER	MCAWW 415.1		1330531	1330241
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B		1325275	1325115
	WATER	SW846 6010B		1319417	1319196
	WATER	SW846 6010B		1319495	1319249
	WATER '	MCAWW 375.4		1330633	1330321
	WATER	MCAWW 310.1	•	1323548	
	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1		1319320	1319131
				1210605	: 1204020
011	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1		1323549	1704101
	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
	WATER	MCAWW 415.1		1330531	1330241 1332246
	WATER	RSK SOP-175		1332454	
	WATER	SW846 8260B	•	1324409	1324190
	WATER	SW846 6010B		1319417	1319196
	WATER	SW846 6010B		1319495	1319249
	WATER	MCAWW 375.4	-	1330633	1330321
	WATER	MCAWW 310.1	*	1323548	1222214
	WATER	MCAWW 310.1		1323547	1323314
4	WATER	MCAWW 350.1		1319320	1319131
012	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
	WATER	MCAWW 415.1		1330531	1330241
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B		1324409	1324190
	WATER	SW846 6010B		1319417	1319196
	WATER	SW846 6010B		1319495	1319249
	WATER	MCAWW 375.4		1330633	1330321
	WATER	MCAWW 310.1		1323548	
	WATER	MCAWW 310.1	¥	1323547	1323314
	WATER	MCAWW 350.1		1319320	1319131

D1K130267

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
013	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1	•	1323549	•
•	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
•	WATER	MCAWW 415.1		1330531	1330241
	WATER	RSK SOP-175	* * * * * * * * * * * * * * * * * * * *	1332454	1332246
	WATER	SW846 8260B		1324409	1324190
•	WATER	SW846 6010B		1319417	1319196
	WATER	SW846 6010B		1319495	1319249
	WATER	MCAWW 375.4		1330633	1330321
	WATER	MCAWW 310.1		1323548	
	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1		1319320	1319131
014	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1		1323554	
	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
	WATER	MCAWW 415.1	•	1330531	1330241
	WATER	RSK SOP-175	•	1332454	1332246
	WATER	SW846 8260B		1324409	1324190
	WATER	SW846 6010B	* · · · · · · · · · · · · · · · · · · ·	1319417	1319196
	WATER	SW846 6010B	1	1319495	1319249
	WATER	MCAWW 375.4	•	1330633	1330321
	WATER	MCAWW 310.1	• .	1323553	•
	WATER	MCAWW 310.1		1323550	1323315
	WATER	MCAWW 350.1		1319320	1319131
				1210605	
015	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1		1323554	7704707
	WATER	MCAWW 325.2		1324257	1324101
	WATER	MCAWW 353.2		1319419	1319201
	WATER	MCAWW 415.1		1330531	1330241
	WATER	RSK SOP-175		1332454	1332246
	WATER	SW846 8260B		1324409	1324190
	WATER	SW846 6010B	•	1319417 1319495	1319196
	WATER	SW846 6010B	••		1319249
	WATER	MCAWW 375.4	·	1330633	1330321
	WATER	MCAWW 310.1		1323553	1222215
	WATER	MCAWW 310.1		1323550	1323315
	WATER	MCAWW 350.1		1319320	1319131

D1K130267

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX ·	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
SAMPLIE	HATKIA	HEIIIOD	<u> </u>	<u> </u>	<u> </u>
016	WATER	SW846 8260B		1324409	1324190
017	WATER	SW846 8260B		1324409	1324190
018	WATER	MCAWW 160.1		1319625	1324239
	WATER	MCAWW 310.1		1325374	
	WATER	MCAWW 325.2	•	1324257	1324101
	WATER	MCAWW 353.2	•	1319419	1319201
	WATER	MCAWW 415.1		1330531	1330241
	WATER -	RSK SOP-175		1332454	1332246
	WATER :	SW846 8260B		1324409	1324190
	WATER	SW846 6010B		1319417	1319196
	WATER	SW846 6010B		1319495	1319249
	WATER	MCAWW 375.4		1330633	1330321
	WATER :	MCAWW 310.1		1325373	
•	WATER	MCAWW 310.1		1325372	1325188
	WATER	MCAWW 350.1		1319320	1319131

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K130267 Work Order #...: EPA461AC-LCS Matrix.....: WATER

LCS Lot-Sample#: D1K200000-409 EPA461AD-LCSD

Prep Date....: 11/19/01 Analysis Date..: 11/19/01
Prep Batch #...: 1324409 Analysis Time..: 11:01

Dilution Factor: 1

•	PERCENT	RECOVERY	RPD	•
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	99	(79 - 119)		SW846 8260B
	98	(79 - 119)	0.69 (0-20)	SW846 8260B
Benzene	97	(79 - 119)	1	SW846 8260B
	99	(79 - 119)	2.2 (0-20)	SW846 8260B
Chlorobenzene	96	(76 - 116)		SW846 8260B
	97 .	(76 - 116)	0.79 (0-20)	SW846 8260B
Toluene	102	(75 - 122)		SW846 8260B
•	104	(75 - 122)	1.4 (0-20)	SW846 8260B
Trichloroethene	93	(81 - 121)		SW846 8260B
	94	(81 - 121)	0.64 (0-20)	SW846 8260B
				٠.
		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane		105	(80 - 120)	•
		105	(80 - 120)	
1,2-Dichloroethane-d4		107	(72 - 127)	·
		110	(72 - 127)	
4-Bromofluorobenzene		96	(79 - 119)	
	٠	99	(79 - 119)	•
Toluene-d8		104	(79 - 119)	
•		105	(79 - 119)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K130267 Work Order #...: EPA461AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K200000-409 EPA461AD-LCSD

 Prep Date....:
 11/19/01
 Analysis Date..:
 11/19/01

 Prep Batch #...:
 1324409
 Analysis Time..:
 11:01

Dilution Factor: 1

		SPIKE	MEASURED	,	PERCENT			
PARAMETER	<u>.</u>	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHO	D
1,1-Dichloroethene		10.0	9.90	ug/L	99		SW846	8260B
	4	10.0	9.83	ug/L	98	0.69	SW846	8260B
Benzene		10.0	9.69	ug/L	97		SW846	8260B
		10.0	9.91	ug/L	99	2.2	SW846	8260B
Chlorobenzene		10.0	9.59	ug/L	96		SW846	8260B
		10.0	9.67	ug/L	97	0.79	SW846	8260B
Toluene		10.0	10.2	ug/L	102		SW846	8260B
		10.0	10.4	ug/L	104	1.4	SW846	8260B
Trichloroethene	•	10.0	9.35	ug/L	93		SW846	8260B
		10.0	9.41	ug/L	94	0.64	SW846	8260B
		-		•				
	1			PERCENT	RECOVERY			
SURROGATE				RECOVERY	LIMITS			
Dibromofluoromethane				105	(80 - 120)		•
			4	105	(80 - 120)		
1,2-Dichloroethane-d4				107	(72 - 127)		
	**			110	(72 - 127)		
4-Bromofluorobenzene	-			96	(79 - 119			
	-			99 .	(79 - 119)		
Foluene-d8				104	(79 - 119)		
				105	(79 - 119)		
				•		•		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K130267 Work Order #...: EPD451AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K210000-275 EPD451AD-LCSD

Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 10:04

Dilution Factor: 1

•	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	92	(79 - 119)		SW846 8260B
	94	(79 - 119)	1.6 (0-20)	SW846 8260B
Benzene	94	(79 - 119)		SW846 8260B
•	96	(79 - 119)	2.4 (0-20)	SW846 8260B
Chlorobenzene	88	(76 - 116)		SW846 8260B
	94	(76 - 116)	6.5 (0-20)	SW846 8260B
Toluene	100	(75 - 122)	•	SW846 8260B
	102	(75 - 122)	2.3 (0-20)	SW846 8260B
Trichloroethene	87	: (81 - 121)		SW846 8260B
·	92	(81 - 121)	4.8 (0-20)	SW846 8260B
		PERCENT	RECOVERY	
GIDDOGA WE		RECOVERY	LIMITS	
SURROGATE				
Dibromofluoromethane		109	(80 - 120)	
		110	(80 - 120)	
1,2-Dichloroethane-d4		114	(72 - 127)	
		114	(72 - 127)	
4-Bromofluorobenzene		92	(79 - 119)	
	•	96	(79 - 119)	
Toluene-d8		109 .	(79 - 119)	

109

(79 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K130267 Work Order #...: EPD451AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K210000-275 EPD451AD-LCSD

Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 10:04

Dilution Factor: 1

PARAMETER 1110011	W846 8260B
Benzene 10.0 9.43 ug/L 94 Si 10.0 9.65 ug/L 96 2.4 Si	W846 8260B W846 8260B W846 8260B
10.0 9.41 ug/L 94 6.5 S	SW846 8260B SW846 8260B SW846 8260B
Trichloroethene 10.0 8.74 ug/L 87 S	SW846 8260B SW846 8260B SW846 8260B
PERCENT RECOVERY SURROGATE RECOVERY LIMITS	
Dibromofluoromethane 109 (80 - 120) 110 (80 - 120)	
1,2-Dichloroethane-d4 114 (72 - 127) 114 (72 - 127) 4-Bromofluorobenzene 92 (79 - 119)	
796 (79 - 119) Toluene-d8 109 (79 - 119) 109 (79 - 119)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K130267 Work Order #...: EPA461AA Matrix.....: WATER

MB Lot-Sample #: D1K200000-409

Prep Date....: 11/19/01 Analysis Time..: 11:53

Analysis Date..: 11/19/01 Prep Batch #...: 1324409

Dilution Factor: 1

•		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	\mathtt{ug}/\mathtt{L}	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND .	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND ·	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	· SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

GC/MS Volatiles

		REPORTI	NG	•
PARAMETER	RESULT	LIMIT	UNITS	METHOD
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro-	ND	1.0	ug/L	SW846 8260B
benzene				•
l,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND .	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
l,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
n-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
L,2-Dibromo-3-	ND	2.0	ug/L	SW846 8260B
chloropropane (DBCP)			-	
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
•	PERCENT	RECOVERY	7	
JURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	111	(80 - 12	20)	
,2-Dichloroethane-d4	115	(72 - 12	•	à
-Bromofluorobenzene	100	(79 - 11	•	1
oluene-d8	108	(79 - 11		

NOTE (S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K130267

Work Order #...: EPD451AA

Matrix....: WATER

MB Lot-Sample #: D1K210000-275

Prep Date....: 11/20/01 Prep Batch #...: 1325275

Analysis Time..: 10:57

Analysis Date..: 11/20/01

Dilution Factor: 1

REPORTING

PARAMETER	RESULT	LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND .	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND ·	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND .	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND -	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND ,	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	\mathtt{ug}/\mathtt{L}	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND.	0.50	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	${\tt ug/L}$	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
Hexachlorobutadiene	, ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

GC/MS Volatiles

Client Lot #	: D1K130267	Work Order #	.: EPD451AA	Matrix:	WATER

		REPORTI	NG		
PARAMETER ,	RESULT	LIMIT	UNITS	METHOD	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trichloro-	ND	1.0	ug/L	SW846 8260B	
benzene				•	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	ŚW846 8260B	
o-Xylene	ND	1.0	ug/L	SW846 8260B	
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B	
1,2-Dibromo-3-	ND	2.0	ug/L	SW846 8260B	
chloropropane (DBCP)			*		
1,2-Dibromoethane (EDB) .	ND	1.0	ug/L	SW846 8260B	
	PERCENT	RECOVER	Z.		
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	109	(80 - 12	20)		
1,2-Dichloroethane-d4	112	(72 - 12	27)		
4-Bromofluorobenzene	98	(79 - 11	L9)		
Toluene-d8	113	(79 - 11	L9)		
NOTE(S):	:				

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K130267 Work Order #...: ENV291CJ-MS Matrix..... WATER

MS Lot-Sample #: D1K130267-001 ENV291CK-MSD

Date Sampled...: 11/11/01 08:15 Date Received..: 11/13/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01

Prep Batch #...: 1324409 Analysis Time..: 13:00

Dilution Factor: 1

		•		•			
	PERCENT	RECOVERY		RPD			Α,
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHO	D ⁱ	*
1,1-Dichloroethene	97	(79 - 119)			SW846	8260B	
\$	97	(79 - 119)	0.11	(0-20)	SW846	8260B	
Benzene	95	(79 - 119)			SW846	8260B	
	99	(79 - 119)	3.4	(0-20)	SW846	8260B	
Chlorobenzene	94	(76 - 116)			SW846	8260B	
	94	(76 - 116)	0.50	(0-20)	SW846	8260B	*
Toluene	103	(75 - 122)			SW846	8260B	
	102	(75 - 122)	1.3	(0-20)	SW846	8260B	
Trichloroethene	96	(81 - 121)			SW846	8260B	
	95	(81 - 121)	0.24	(0-20)	SW846	8260B	
	¥.			•			
GUDDOG A ME		PERCENT		RECOVERY			
SURROGATE	-	RECOVERY	,	LIMITS	_		
Dibromofluoromethane		106		(80 - 120	'		
		108		(80 - 120)		%	
1,2-Dichloroethane-d4		105		(72 - 127)			
4 7 67 1		111		(72 - 127)			
4-Bromofluorobenzene		102		(79 - 119)			
malasas lo		97		(79 - 119)			
Toluene-d8		107		(79 - 119)	l		
		105		(79 - 119)			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K130267 Work Order #...: ENV291CJ-MS Matrix.....: WATER

MS Lot-Sample #: D1K130267-001 ENV291CK-MSD

Date Sampled...: 11/11/01 08:15 Date Received..: 11/13/01
Prep Date....: 11/19/01 Analysis Date..: 11/19/01
Prep Batch #...: 1324409 Analysis Time..: 13:00

Dilution Factor: 1

-	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO) · · · · ·
1,1-Dichloroethene	ND	10.0	9.68	ug/L	97		SW846	8260B
	ND	10.0	9.67	ug/L	97	0.11	SW846	8260B
Benzene	ND	10.0	9.53	ug/L	95		SW846	8260B
	ND	10.0	9.86	ug/L	99	3.4	SW846	8260B
Chlorobenzene	ND	10.0	9.43	ug/L	94		SW846	8260B
:	ND	10.0	9.38	ug/L	94	0.50	SW846	8260B
Toluene	ND	10.0	10.3	ug/L	103		SW846	8260B
	ND	10.0	10.2	ug/L	102	1.3	SW846	8260B
Trichloroethene	2.1	10.0	11.7	ug/L	96 `		SW846	8260B
	2.1	10.0	11.7	ug/L	95	0.24	SW846	8260B
			PERCENT		RECOVERY			
SURROGATE	-		RECOVER	Y	LIMITS	_		

	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	106	(80 - 120)	, .
	108	(80 - 120)	
1,2-Dichloroethane-d4	105	(72 - 127)	.•
	111	(72 - 127)	
4-Bromofluorobenzene	102	(79 - 119)	ž
	97	(79 - 119)	
Toluene-d8	107	(79 - 119)	•
· ·	105	(79 - 119)	
	ž.		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K130267 . Work Order #...: ENV3V1A1-MS Matrix..... WATER

MS Lot-Sample #: D1K130267-010 ENV3V1A2-MSD

 Date Sampled...:
 11/11/01 12:35
 Date Received...:
 11/13/01

 Prep Date.....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325275
 Analysis Time...:
 12:21

Dilution Factor: 4

	PERCENT	RECOVERY		RPD			
PARAMETER	RECOVERY	LIMITS RPD		LIMITS	METHOD	METHOD	
1,1-Dichloroethene	96	(79 - 119)			SW846 82	:60B	
	95	(79 - 119)	0.77	(0-20)	SW846 82	:60B	
Benzene	97	(79 - 119)	۴,		SW846 82	60B	
	96	(79 - 119)	1.4	(0-20)	SW846 82	:60B	
Chlorobenzene	94	(76 - 116)			SW846 82	60B	
	94	(76 - 116)	0.44	(0-20)	SW846 82	60B	
Toluene	107	(75 - 122)			SW846 82	60B	
	106	(75 - 122)	0.68	(0-20)	SW846 82	60B	
Trichloroethene	88	(81 - 121)			SW846 82	60B	
	77 a	(81 - 121)	3.0	(0-20)	SW846 82	60B	
	**						
;		PERCENT		RECOVERY		•	
SURROGATE		RECOVERY		LIMITS			
Dibromofluoromethane		105	•	(80 - 120)	•	
		104		(80 - 120)	i	
1,2-Dichloroethane-d4		105		(72 - 127) ·		
		107		(72 - 127)		
4-Bromofluorobenzene		93		(79 - 119		4	
•		94		(79 - 119			
Toluene-d8		113		(79 - 119			

112

(79 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K130267 Work Order #...: ENV3V1A1-MS Matrix..... WATER

MS Lot-Sample #: D1K130267-010 ENV3V1A2-MSD

Date Sampled...: 11/11/01 12:35 Date Received..: 11/13/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 12:21

Dilution Factor: 4

	SAMPLE	SPIKE	MEASRD		PERCENT		
PARAMETER	AMOUNT	AMT	TRUOMA	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	ND	40.0	38.4	ug/L	96		SW846 8260B
	ND	40.0	38.1	ug/L	95	0.77	SW846 8260B
Benzene	ND	40.0	38.9	ug/L	97		SW846 8260B
•	ND	40.0	38.3	ug/L	96	1.4	SW846 8260B
Chlorobenzene	' ND	40.0	37.7	ug/L	94		SW846 8260B
	ND	40.0	37.5	ug/L	94	0.44	SW846 8260B
Toluene	ND	40.0	42.7	ug/L	107		SW846 8260B
	- N D	40.0	42.4	ug/L	106	0.68	SW846 8260B
Trichloroethene	120	40.0	158	ug/L	88		SW846 8260B
**	120	40.0	153	ug/L	77 a	3.0	SW846 8260B

			PERCENT	RECOVERY	W.	
SURROGATE			RECOVERY	LIMITS		
Dibromofluoromethane			105	(80 - 120)		
			104	(80 - 120)		
1,2-Dichloroethane-d4		•	105	(72 - 127)		
			107	(72 - 127)		
4-Bromofluorobenzene	***	:	93	(79 - 119)		
			94	(79 - 119)		
Toluene-d8	,		113	(79 - 119)		
	• .		112	(79 - 119)		
	*		· ·			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: D1K130267 Work Order #...: EPL4Q1AC-LCS Matrix..... WATER

LCS Lot-Sample#: I1K280000-454 EPL4Q1AD-LCSD

 Prep Date....:
 11/21/01
 Analysis Date..:
 11/21/01

 Prep Batch #...:
 1332454
 Analysis Time..:
 02:57

Dilution Factor: 1

	PERCENT	RECOVERY		RPD,	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
Ethane	98	(70 - 130)	•		RSK SOP-175
	98	(70 - 130)	0.15	(0-30)	RSK SOP-175
Ethene	92	(70 - 130)			RSK SOP-175
	93	(70 - 130)	0.22	(0-30)	RSK SOP-175
Methane	92	(70 - 130)			RSK SOP-175
	92	(70 - 130)	0.14	(0-30)	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: D1K130267 Work Order #...: EPL4Q1AC-LCS Matrix..... WATER

LCS Lot-Sample#: I1K280000-454 EPL4Q1AD-LCSD

 Prep Date....:
 11/21/01
 Analysis Date..:
 11/21/01

 Prep Batch #...:
 1332454
 Analysis Time..:
 02:57

Dilution Factor: 1

		SPIKE AMOUNT	MEASÜREI AMOUNT	O UNITS	PERCENT RECOVERY	RPD	METHOD
PARAMETER Ethane		65.1	63.5	ug/L	98		RSK SOP-175
Echane	а ^{ф.} м	64.9	63.4	ug/L	98	0.15	RSK SOP-175
Ethene		60.8	56.0	ug/L	92		RSK SOP-175
•	+_	60.7	56.2	ug/L	93	0.22	RSK SOP-175
Methane		34.8	32.0	ug/L	92		RSK SOP-175
		34.7	32.0	ug/L	92	0.14	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: D1K130267

Work Order #...: EPL4Q1AA

Matrix....: WATER

MB Lot-Sample #: I1K280000-454

Prep Date....: 11/21/01 Prep Batch #...: 1332454 Analysis Time..: 02:54

Analysis Date..: 11/21/01

Dilution Factor: 1

REPORTING

		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Ethane	ND	0.50	ug/L	RSK SOP-175
Ethene	ND	0.50	ug/L	RSK SOP-175
Methane	ND	0.50	ug/L	RSK SOP-175
NOTE(S):		*		<u></u>

MATRIX SPIKE SAMPLE EVALUATION REPORT.

GC Volatiles

Client Lot #...: D1K130267 Work Order #...: EN29M1A3-MS Matrix.....: WATER

MS Lot-Sample #: D1K150277-006 EN29M1A4-MSD

Date Sampled...: 11/12/01 17:00 Date Received..: 11/14/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01

Prep Batch #...: 1332454 Analysis Time..: 05:47

Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Ethane	93	(68 - 104)			RSK SOP-175
	92	(68 - 104)	1.1	(0-14)	RSK SOP-175
Ethene	85	(69 - 102)			RSK SOP-175
Benefic	86	(69 - 102)	0.53	(0-15)	RSK SOP-175
Methane	94	(23 - 148)			RSK SOP-175
меснане	94	(23 - 148)	0.28	(0-21)	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: D1K130267 Work Order #...: EN29M1A3-MS Matrix.....: WATER

MS Lot-Sample #: D1K150277-006 EN29M1A4-MSD

Date Sampled...: 11/12/01 17:00 Date Received..: 11/14/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332454 Analysis Time..: 05:47

Dilution Factor: 1

	SAMPLE	SPIKE	MEASRD		PERCENT	1	
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
Ethane	ND	67.8	62.7	ug/L	93		RSK SOP-175
	, ND	67.6	62.1	ug/L	92	1.1	RSK SOP-175
Ethene	ND	63.3	53.9	ug/L	85		RSK SOP-175
	ND	63.2	54.2	ug/L	86	0.53	RSK SOP-175
Methane	2.6	36.2	36.7	ug/L	94		RSK SOP-175
	2.6	36.1	36.6	ug/L	94	0.28	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D1K130267

Matrix....: WATER

PERCENT.

RECOVERY

PREPARATION-

PARAMETER

RECOVERY

<u>LIMI</u>TS METHOD ANALYSIS DATE WORK ORDER #

LCS Lot-Sample#: D1K150000-495 Prep Batch #...: 1319495

(92 - 114) SW846 6010B

11/20/01

EN3AH1AD

97

Iron

Dilution Factor: 1

Manganese

98

· (89 - 114) SW846 6010B

11/20/01

EN3AH1AE

Dilution Factor: 1

Analysis Time..: 23:37

Analysis Time..: 23:37

NOTE(S):

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #	:: D1K	130267		Matrix WATER			
PARAMETER	SPIKE AMOUNT	MEASURI AMOUNT	ED UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Samp	ole#: D1K 1.00	150000-4 0.975	195 Prep B mg/L Dilution Fac Analysis Time	97 tor: 1	: 1319495 SW846 6010B	11/20/01	EN3AH1AD
Manganese	0.500	0.489	mg/L Dilution Fac Analysis Tim		SW846 6010B	11/20/01	EN3AH1AE

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

LABORATORY CONTROL SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #:	D1K130267			Matrix	: WATER
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: Sodium	D1K150000- 98			11/20/01	EN2W31AH
Calcium	97	(88 - 108) Dilution Facto Analysis Time		11/20/01	EN2W31AJ
Iron	99 ;	(92 - 114) Dilution Facto Analysis Time	•	11/20/01	EN2W31AK
Magnesium	100	(93 - 113) Dilution Factor Analysis Time.		11/20/01	EN2W31AL
Manganese	99	(89 - 114) Dilution Facto Analysis Time		11/20/01	EN2W31AM
Potassium	95	(87 - 110) Dilution Facto Analysis Time.		11/20/01	EN2W31AN

LABORATORY CONTROL SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot	#: D1K	(130267	Matrix:	: WATER	
PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT UNITS	PERCNT RECVRY METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
ICC Ict-Cam	mle#. Dlk	:150000-417 Prep F	Satch #: 1319417	· •	
Sodium	50.0	49.2 mg/L	98 SW846 60		EN2W31AH
DOGIGM	50.0	Dilution Fac			
		Analysis Tim			
· ·				•	•
Calcium	50.0	48.5 mg/L	97 SW846 60	11/20/01	EN2W31AJ
		Dilution Fac	tor: 1	$(\mathbf{e}_{i}, \mathbf{e}_{i}) = (\mathbf{e}_{i}, \mathbf{e}_{i}) = (\mathbf{e}_{i}, \mathbf{e}_{i}) = (\mathbf{e}_{i}, \mathbf{e}_{i})$	**
		Analysis Tim	e: 21:54		
Iron	1.00	0.988 mg/L	99 . SW846 60	010B 11/20/01	EN2W31AK
11011	2.00	Dilution Fac			
		Analysis Tim	e: 21:54		
			700 00000	010B 11/20/01	EN2W31AL
Magnesium	50.0	50.0 mg/L	100 SW846 60	11/20/01	EWSM2TWT
		Dilution Fac			
		Analysis Tim	e: 21:54		4
Manganese	0.500	0.495 mg/L	99 SW846 60	010B 11/20/01	EN2W31AM
_		Dilution Fac	tor: 1		
		Analysis Tim	e: 21:54		•
Potassium	50.0	47.3 mg/L	95 SW846 60	11/20/01	EN2W31AN
		Dilution Fac	tor: 1		
•		Analysis Tim	e: 21:54		
	•		•		
NOTE(S):	•. ,				

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: D1K130267

NOTE(S):

Matrix....: WATER

PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION - ANALYSIS DATE	WORK ORDER #
MB Lot-Sample Iron	#: D1K150000 ND	0-495 Prep Batch #: 0.10 mg/L Dilution Factor: 1 Analysis Time: 23:33	1319495 SW846 6010B	11/20/01	EN3AH1AA
Manganese	ND .	0.010 mg/L Dilution Factor: 1 Analysis Time: 23:33	SW846 6010B	11/20/01	EN3AH1AC

METHOD BLANK REPORT

DISSOLVED Metals

Client Lot #...: D1K130267

Matrix....: WATER PREPARATION-WORK REPORTING ANALYSIS DATE ORDER # LIMIT UNITS METHOD PARAMETER RESULT MB Lot-Sample #: D1K150000-417 Prep Batch #...: 1319417 SW846 6010B 11/20/01 EN2W31AC 0.20 mg/L Calcium ND Dilution Factor: 1 Analysis Time..: 21:50 11/20/01 EN2W31AD SW846 6010B Iron ND 0.10 mg/L Dilution Factor: 1 Analysis Time..: 21:50 SW846 6010B 11/20/01 EN2W31AE Magnesium ND 0.20 mg/L Dilution Factor: 1 Analysis Time..: 21:50 11/20/01 EN2W31AF Manganese ND 0.010 mg/L SW846 6010B Dilution Factor: 1 Analysis Time..: 21:50 11/20/01 EN2W31AG Potassium ND 3.0 mg/L SW846 6010B Dilution Factor: 1 Analysis Time..: 21:50 5.0 mg/L SW846 6010B 11/20/01 EN2W31AA Sodium ND Dilution Factor: 1 Analysis Time. : 21:50

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot : Date Sample		.: 11/13/01	Matrix WATER			
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS LotSamp	le #: D1K13	0267-001 Prep B	Batch #	.: 1319495		
Iron	NC, MSB	(92 - 114)		SW846 6010B	11/20/01	ENV291CE
22011	NC, MSB	(92 - 114)	(0 ⁻ -20)	SW846 6010B	11/20/01	ENV291CF
	•	Dilution Fac	tor: 1			
	9	Analysis Tim	e: 23:49			
Manganese	103	(89 - 114)		SW846 6010B	11/20/01	ENV291CG
J	106	(89 - 114) 1.4	(0-20)	SW846 6010B	11/20/01	ENV291CH
		. Dilution Fac	tor: 1			
		Analysis Tim	e: 23:49			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE DATA REPORT,

TOTAL Metals

Client Lot	t #:	D1K130267								
PARAMETER	SAMPLE	SPIKE		RED	PERCNT RECVRY	•	<u>D</u>	PREPARATION- ANALYSIS DATE	WORK ORDER #	
MS Lot-Sar	mple #:	DIK13	0267-0	01 Prep Batch	h #: 13	319495				
Iron	56.6	1.00		mg/L Qualifiers: NO	T MCR	SW846	6010B	11/20/01	ENV291CE	
· .	56.6	1.00	70.5	mg/L Qualifiers: NO Dilution Factor: Analysis Time:	C,MSB	SW84 _, 6	6010B	, 11/20/01	ENV291CF	
Manganese										
	0.54	0.500	1.06	mg/L	103		6010B	11/20/01	ENV291CG	
	0.54	0.500	1.07	mg/L	106	1.4 SW846	6010B	11/20/01	ENV291CH	
				Dilution Factor:	1			•		
		•		Analysis Time:	23:49					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #...: D1K130267 Matrix....: WATER Date Sampled...: 11/11/01 08:15 Date Received..: 11/13/01 PERCENT RECOVERY RPD PREPARATION-WORK RECOVERY LIMITS RPD LIMITS METHOD ANALYSIS DATE ORDER # MS Lot-Sample #: D1K130267-001 Prep Batch #...: 1319417 (88 - 108)Calcium 91 SW846 6010B 11/20/01 ENV291A3 98 (88 - 108) 1.8 (0-20)SW846 6010B 11/20/01 ENV291A4 Dilution Factor: 1 Analysis Time..: 22:05 Iron 97 (92 - 114)11/20/01 SW846 6010B ENV291A5 98 (92 - 114) 1.2 (0-20)SW846 6010B 11/20/01 ENV291A6 Dilution Factor: 1 Analysis Time..: 22:05 Magnesium 101 11/20/01 (93 - 113)SW846 6010B ENV291A7 (93 - 113) 0.37 (0-20) 102 SW846 6010B 11/20/01 ENV291A8 Dilution Factor: 1 Analysis Time..: 22:05 Manganese 97 (89 - 114)SW846 6010B 11/20/01 ENV291A9 99 (89 - 114) 1.3 (0-20) SW846 6010B 11/20/01 ENV291CA Dilution Factor: 1 Analysis Time..: 22:05 Potassium 97 (87 - 110)11/20/01 SW846 6010B ENV291CC 97 (87 - 110) 0.55 (0-20)SW846 6010B 11/20/01 ENV291CD Dilution Factor: 1 Analysis Time..: 22:05 Sodium 101 (91 - 111)11/20/01 SW846 6010B ENV291A1 101 (91 - 111) 0.10 (0-20)SW846 6010B 11/20/01 ENV291A2 Dilution Factor: 1 Analysis Time..: 22:05

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

MATRIX SPIKE SAMPLE DATA REPORT

DISSOLVED Metals

	Client Lo												
	Date Samp	led:	11/11	/01 0	8:15 D	ate Receiv	ved: 1	1/13/	01				
		SAMPLE	SPIKE	MEAS	URED		PERCNT				PRE	PARATION-	WORK
	PARAMETER	AMOUNT	AMT	NOMA	NT	UNITS	RECVRY	RPD	METHO	D	ANA	LYSIS DATE	ORDER #
				•;									
		mple #:	D1K13	0267-0	001 P	rep Batch	#: 1	31941	7				
	Calcium				•• .	4-							
		131	50.0	176		mg/L	91			6010B		11/20/01	ENV291A3
		131	50.0	180		mg/L	98	1.8	SW846	6010B		11/20/01	ENV291A4
						on Factor: 1							
		*			Anaiys	is Time: 2	2:05						
	Tron												
	Iron	ND	1.00	0.974	1	mg/L	97		CMO16	6010B		11/20/01	ENV291A5
		ND	1.00	0.986		mg/L	98	1.2		6010B		11/20/01	ENV291A5
		MD		0.500		on Factor: 1		4.2	DWOTO	00105		11/20/01	DNVZJIAO
						is Time: 2						•	
					murys	15 111116 2	2.05						
	Magnesium					•	•						
		50.0	50.0	101		mg/L	101		SW846	6010B		11/20/01	ENV291A7
		50.0	50.0	101		mg/L	102	0.37	SW846			11/20/01	ENV291A8
						on Factor: 1							•
					Analys	is Time: 2	2:05						
			*										
	Manganese												
		0.020	0.500			mg/L	97			6010B		11/20/01	ENV291A9
		0.020	0.500	0.514	<u> 1</u>	mg/L	99	1.3	SW846	6010B	•	11/20/01	ENV291CA
		•				on Factor: 1							
					Analys	is Time: 2	2:05	•					
											•	*	
	Potassium	NTD	50.0	-1		/*	0.77		G110 4 6	60105		77 /00 /07	
			50.0	51.2		mg/L	97		SW846			11/20/01	ENV291CC
		ND .	50.0	50.9		mg/L	97	0.55	SW846	6010B		11/20/01	ENV291CD
						on Factor: 1 is Time: 2							
					MILATYS.	15 11Me: 2.	2:05		•				
	Sodium												
. '		43.7	50.0	93.9	ī	mg/L	101		SW846	6010B		11/20/01	ENV291A1
		•		94.0		mg/L	101		SW846			11/20/01	ENV291A2
						on Factor: 1							
						is Time: 22	2:05						
			•										
,	TOWN (C)												

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #	: D1K13	0267				Matrix	: WATER
		RECOVERY	RPD	*		PREPARATION-	PREP
TO A MERCETO	PERCENT RECOVERY	LIMITS RPD	LIMITS	METHOD		ANALYSIS DATE	
PARAMETER Ammonia as N		WO# : EN2A81AC	-LCS/EN2	A81AD-LCSD	LCS	Lot-Sample#: D1K1	50000-320
Annionia as N	104	(90 - 110)		MCAWW 350	.1	11/14/01	1319320
	106	(90 - 110) 1.2	(0-10)	MCAWW 350	.1	11/14/01	1319320
		Dilution Fac			•		
Nitrate-Nitr		WO# . ENCYMIAC	-I.CS/ENC	XM1 AD-T-CSD	LCS	Lot-Sample#: D1K1	50000-419
Nitrate-Nitr	96	(90 - 110)	. 1100/1111	MCAWW 353	. 2	11/14/01	1319419
	96	(90 - 110) 0.0					1319419
	50	Dilution Fac					
Total Alkali	nity	WO#:EN9N21A0	C-LCS/ENS	N21AD-LCSD	LCS	Lot-Sample#: D1K1	90000-547
TOCAL PIRALL	99	(95 - 110)	•	MCAWW 310	.1	11/19/01	1323547
	100	(95 - 110) 1.4				11/19/01 .	1323547
		Dilution Fac					
				,		Ict Camplett Diki	90000-550
Total Alkali		WO#:EN9N41AC	C-LCS/ENS	NATAD-LCSD	1 LCS	Lot-Sample#: D1K1 11/19/01	1323550
	98	(95 - 110)	(0.10)	MCAWW 310		11/19/01	1323550
	108	(95 - 110) 9.5		MCAWW 310		11/19/01	1323330
	•	Dilution Fac					
Total Alkali	nity	WO#:EPEL61AI	-LCS/EPI	EL61AE-LCSD	LCS	Lot-Sample#: D1K2	10000-372
	100	(95 - 110)		MCAWW 310	.1	11/20/01	1325372
	100	(95 - 110) 0.22	2 (0-10)	MCAWW 310	.1	11/20/01	1325372
		Dilution Fac	tor: 1				
	r	7					
Total Dissol Solids	Lved	WO#:EPCLQ1A	C-LCS/EP	CLQ1AD-LCSD	LCS	Lot-Sample#: D1K1	
	87			MCAWW 160			
	88	(86 - 106) 0.93 Dilution Fac		MCAWW 160	.1	11/15/01	1319625
matal Overand	i - Carebon	WOH. PDCE 51 NO	T_T.CG /FD(2551AD-1.CSD) I.CS	Lot-Sample#: D1K2	260000-531
Total Organi	97	(90 - 110)	2 1100/111	MCAWW 415	. 1	11/22-11/23/01	1330531
	98	(90 - 110) 1.0		MCAWW 415		11/22-11/23/01	1330531
	70	Dilution Fac		7.5	•		
Total Organi	ic Carbon	WO# : EPG571A0	C-LCS/EP	3571AD-LCSD	LCS	Lot-Sample#: D1K2	260000-527
TOTAL OLGANI	97	(90 - 110)	, _	MCAWW 415		11/22-11/23/01	
	97	(90 - 110) 0.5	3 (0-10)			11/22/01	
	٠,	Dilution Fac					

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: D1K130267

Matrix..... WATER

PERCENT PARAMETER RECOVERY

RECOVERY

LIMITS

RPD LIMITS

METHOD

PREPARATION- PREP

ANALYSIS DATE BATCH #

NOTE(S):

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Nitrate-Nitrite Now September Now Now September Now September Now September Now Now September Now Now Now Now September Now Now Now Now Now Now Now Now Now
PARAMETER AMOUNT UNITS RECVRY RPD METHOD LCS Lot-Sample#: D1K150000-320 ### WC#: EN2A81AC-LCS/EN2A81AD-LCSD LCS Lot-Sample#: D1K150000-320 ### 4.00
PARAMETER
Ammonia as N
4.00 4.18 mg/L 104 MCAWW 350.1 11/14/01 1319320 4.00 4.23 mg/L 106 1.2 MCAWW 350.1 11/14/01 1319320 Dilution Factor: 1 Nitrate-Nitrite WO#:EN2XM1AC-LCS/EN2XM1AD-LCSD LCS Lot-Sample#: D1K150000-419 4.00 3.82 mg/L 96 MCAWW 353.2 11/14/01 1319419 4.00 3.82 mg/L 96 0.0 MCAWW 353.2 11/14/01 1319419 Dilution Factor: 1 Total Alkalinity WO#:EN9N21AC-LCS/EN9N21AD-LCSD LCS Lot-Sample#: D1K190000-547 185 183 mg/L 99 MCAWW 310.1 11/19/01 1323547 185 185 mg/L 100 1.4 MCAWW 310.1 11/19/01 1323547 Dilution Factor: 1
4.00 4.23 . mg/L 106 1.2 MCAWW 350.1 11/14/01 1319320 Dilution Factor: 1 Nitrate-Nitrite
Dilution Factor: 1 Nitrate-Nitrite
4.00 3.82 mg/L 96 MCAWW 353.2 11/14/01 1319419 4.00 3.82 mg/L 96 0.0 MCAWW 353.2 11/14/01 1319419 Dilution Factor: 1 Total Alkalinity WO#:EN9N21AC-LCS/EN9N21AD-LCSD LCS Lot-Sample#: D1K190000-547 185 183 mg/L 99 MCAWW 310.1 11/19/01 1323547 185 185 mg/L 100 1.4 MCAWW 310.1 11/19/01 1323547 Dilution Factor: 1
4.00 3.82 mg/L 96 MCAWW 353.2 11/14/01 1319419 4.00 3.82 mg/L 96 0.0 MCAWW 353.2 11/14/01 1319419 Dilution Factor: 1 Total Alkalinity WO#:EN9N21AC-LCS/EN9N21AD-LCSD LCS Lot-Sample#: D1K190000-547 185 183 mg/L 99 MCAWW 310.1 11/19/01 1323547 185 185 mg/L 100 1.4 MCAWW 310.1 11/19/01 1323547 Dilution Factor: 1
4.00 3.82 mg/L 96 0.0 MCAWW 353.2 11/14/01 1319419 Dilution Factor: 1 Total Alkalinity WO#:EN9N21AC-LCS/EN9N21AD-LCSD LCS Lot-Sample#: D1K190000-547 185 183 mg/L 99 MCAWW 310.1 11/19/01 1323547 185 185 mg/L 100 1.4 MCAWW 310.1 11/19/01 1323547 Dilution Factor: 1
Dilution Factor: 1 Total Alkalinity
Total Alkalinity WO#:EN9N21AC-LCS/EN9N21AD-LCSD LCS Lot-Sample#: D1K190000-547 185 183 mg/L 99 MCAWW 310.1 11/19/01 1323547 185 185 mg/L 100 1.4 MCAWW 310.1 11/19/01 1323547 Dilution Factor: 1
185 183 mg/L 99 MCAWW 310.1 11/19/01 1323547 185 185 mg/L 100 1.4 MCAWW 310.1 11/19/01 1323547 Dilution Factor: 1
185 183 mg/L 99 MCAWW 310.1 11/19/01 1323547 185 185 mg/L 100 1.4 MCAWW 310.1 11/19/01 1323547 Dilution Factor: 1
185 185 mg/L 100 1.4 MCAWW 310.1 11/19/01 1323547 Dilution Factor: 1
Dilution Factor: 1
Total Alkalinity WO#:EN9N41AC-LCS/EN9N41AD-LCSD LCS Lot-Sample#: D1K190000-550
185 181 mg/L 98 MCAWW 310.1 11/19/01 1323550
185 200 mg/L 108 9.5 MCAWW 310.1 11/19/01 1323550
Dilution Factor: 1
Total Alkalinity WO#:EPEL61AD-LCS/EPEL61AE-LCSD LCS Lot-Sample#: D1K210000-372
200 100 mg/ = 100 mg/ = 100 mg/ = 100 mg/ = 100 mg/ = 100 mg/ = 100 mg/ = 100 mg/ = 100 mg/ = 100 mg/ = 100 mg/
185 184 mg/L 100 0.22 MCAWW 310.1 11/20/01 1325372 Dilution Factor: 1
Dilution Factor: 1
Total Dissolved WO#:EPCLQ1AC-LCS/EPCLQ1AD-LCSD LCS Lot-Sample#: D1K150000-625
Solids
500 436 mg/L 87 MCAWW 160.1 11/15/01 1319625
500 440 mg/L 88 0.91 MCAWW 160.1 11/15/01 1319625
Dilution Factor: 1
/
Total Organic Carbon WO#:EPG551AC-LCS/EPG551AD-LCSD LCS Lot-Sample#: D1K260000-531
25.0 24.2 mg/L 97 MCAWW 415.1 11/22-11/23/01 1330531
25.0 24.5 mg/L 98 1.0 MCAWW 415.1 11/22-11/23/01 1330531
Dilution Factor: 1
Total Organic Carbon WO#:EPG571AC-LCS/EPG571AD-LCSD LCS Lot-Sample#: D1K260000-527
25.0 24.3 mg/L 97 MCAWW 415.1 11/22-11/23/01 1330527
25.0 24.2 mg/L 97 0.53 MCAWW 415.1 11/22/01 1330527

(Continued on next page)

Dilution Factor: 1

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: D1K130267

Matrix....: WATER

SPIKE

MEASURED

PERCNT

PREPARATION-

PREP

PARAMETER

TRUOMA

TUUOMA

RECVRY RPD METHOD

ANALYSIS DATE

BATCH

NOTE(S):

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: D1K130267

Matrix....: WATER

PARAMETER	RECOVERY L	RECOVERY IMITS METHOD		PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: EPADRIAC	LCS Lot-	-Sample#: D1K200000	-257
	100 (9	92 - 109) MCAWW 325.2		11/16/01	1324257
	** 1	Dilution Factor: 1	•		
	i i	Analysis Time: 13:00			
Sulfate	The second secon	Work Order #: EPHC31AC		-Sample#: D1K260000 11/26/01	-633 1330633
	1	Dilution Factor: 1 Analysis Time: 12:30		,,	

NOTE(S):

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: D1K130267

NOTE(S):

Matrix..... WATER

PARAMETER Chloride	SPIKE AMOUNT	MEASURI AMOUNT	UNITS		METHOD 1AC LCS Lot-Sample	PREPARATION - ANALYSIS DATE #: D1K200000-2	PREP BATCH #
CHIOLIGE	50.0	49.8	mg/L Dilution Factor Analysis Time	100	MCAWW 325.2	11/16/01	1324257
Sulfate	25.0	24.6		98 : 1	1AC LCS Lot-Sample MCAWW 375.4	e#: D1K260000-6 11/26/01	33 1330633

METHOD BLANK REPORT

General Chemistry

Matrix..... WATER

Client	Lot	#:	D1K130267
--------	-----	----	-----------

					DD 05
	DEIGHT III	REPORTING	MERIOD	PREPARATION-	PREP BATCH #
PARAMETER Ammonia as N	RESULT	LIMIT UNITS Work Order #: EN2A81AA	MB Lot-Sample #:	ANALYSIS DATE	BAICH #
AllillOIIIA AS N	ND	0.10 mg/L	MCAWW 350.1	11/14/01	1319320
		Dilution Factor: 1		, .	
,	·	Analysis Time: 08:00			
	•	·	•		
Chloride		Work Order #: EPADR1AA	-		
	ND	2.5 mg/L	MCAWW 325.2	11/16/01	1324257
	±	Dilution Factor: 1	•		
	•	Analysis Time: 13:00			
Nitrate-Nitrite		Work Order #: EN2XM1AA	MB Lot-Sample #:	D1K150000-419	
NICIACO NICIICO	ND	0.10 mg/L	MCAWW 353.2	11/14/01	1319419
•		Dilution Factor: 1		•	
	÷	Analysis Time: 08:00			
		•			
Sulfate		Work Order #: EPHC31AA	~		
	ND ,	5.0 mg/L	MCAWW 375.4	11/26/01	1330633
·	٠	Dilution Factor: 1	¢		
	:	Analysis Time: 12:30	ν̄		
Total Alkalinity	ei	Work Order #: EN9N21AA	MB Lot-Sample #:	D1K190000-547	
,	ND	5.0 mg/L	MCAWW 310.1	11/19/01	1323547
•		Dilution Factor: 1			
•		Analysis Time: 14:00			
Total Alkalinity		Work Order #: EN9N41AA	-		* 202550
	ND	5.0 mg/L Dilution Factor: 1	MCAWW 310.1	11/19/01	1323550
		Analysis Time: 18:00		•	
		Analysis lime 10.00			
Total Alkalinity	.*	Work Order #: EPEL61AA	MB Lot-Sample #:	D1K210000-372	
_	ND	5.0 mg/L	MCAWW 310.1	11/20/01	1325372
	7.	Dilution Factor: 1			
		Analysis Time: 16:00			
matal missalassi		Marsh Order # FDCT CIRR	MD Tab Ga1- #	D18150000 C05	
Total Dissolved Solids	K	Work Order #: EPCLQ1AA	ыв гос-гашьте #:	DTKT20000-672	
SOLIUS	ND	10.0 mg/L	MCAWW 160.1	11/15/01	1319625
	:	Dilution Factor: 1	1.0.1 100.1	,,	
	4	Analysis Time: 12:00	•		
	3				
Total Organic Carb	on ·	Work Order #: EPG571AA	_		
	ND	1.0 mg/L	MCAWW 415.1	11/22-11/23/01	1330527
		Dilution Factor: 1			
	* *	Analysis Time: 00:00		w.	

(Continued on next page)

METHOD BLANK REPORT

General Chemistry

Client Lot #...: D1K130267

Matrix..... WATER

REPORTING PREPARATION- PREP PARAMETER RESULT LIMIT UNITS METHOD ANALYSIS DATE BATCH #

Total Organic Carbon Work Order #: EPG551AA MB Lot-Sample #: D1K260000-531

ND 1.0 mg/L MCAWW 415.1 11/22-11/23/01 1330531

Dilution Factor: 1
Analysis Time..: 04:00

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot # Date Sampled			Date Received	1: 11/14/01	Matrix	.: WATER
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N		WO#:	ENV3F1A1-MS/	ENV3F1A2-MSD	MS Lot-Sample #: D1	.K130267-003
	110	(90 - 110)		MCAWW 350.1	11/14/01	1319320
	109	(90 - 110)	0.53 (0-10)	MCAWW 350.1	11/14/01	1319320
		Dilut	ion Factor: 1			
		Analy	rsis Time: 08:0	00		
Chloride		. WO#:	ENV3F1A5-MS/	ENV3F1A6-MSD	MS Lot-Sample #: D1	.K130267-003
	97	(92 - 109)		MCAWW 325.2	11/16/01	1324257
	99	(92 - 109)	0.50 (0-10)	MCAWW 325.2	11/16/01	1324257
		Dilut	ion Factor: 1			
		Analy	rsis Time: 13:0			
Nitrate-Nitra	ite	WO#:	ENV3F1A3-MS/	ENV3F1A4-MSD	MS Lot-Sample #: D1	.K130267-003
	96	(90 - 110)		MCAWW 353.2	11/14/01	1319419
	97	(90 - 110)	1.0 (0-10)	MCAWW 353.2	11/14/01	1319419
			ion Factor: 1	0		
Sulfate		WO#:	EN1111AV-MS/	EN1111AW-MSD	MS Lot-Sample #: D1	K150147-001
	96	(88 - 110)		MCAWW 375.4	11/26/01	1330633
	94	(88 - 110)	1.1 (0-11)	MCAWW 375.4	11/26/01	1330633
		,	ion Factor: 1 sis Time: 12:3	O		
Total Organic			ENV371A1-MS/	ENV371A2-MSD	-	
	101	(90 - 110)		MCAWW 415.1	11/22-11/23/01	
•	102		0.88 (0-10)	MCAWW 415.1	11/22-11/23/01	1330531
			ion Factor: 1	*	•	
		Analy	sis Time: 07:0	0		•
Total Organic					MS Lot-Sample #: D1	
	99	(90 - 110)		MCAWW 415.1	11/22-11/23/01	
	97	(90 - 110)	1.9 (0-10)	MCAWW 415.1	11/22-11/23/01	1330523
		Dilut	ion Factor: 1			
		Analy	sis Time: 00:0	0		
						•

NOTE(S):

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Matrix..... WATER

Date Sampled...: 11/14/01 10:01 Date Received..: 11/14/01 PREPARATION-PREP SAMPLE SPIKE MEASURED PERCNT ANALYSIS DATE BATCH # RECVRY RPD METHOD PARAMETER AMOUNT AMT AMOUNT UNITS WO#: ENV3F1A1-MS/ENV3F1A2-MSD MS Lot-Sample #: D1K130267-003 Ammonia as N 11/14/01 1319320 MCAWW 350.1 110 0.13 5.00 5.63 mg/L 11/14/01 1319320 0.53 MCAWW 350.1 5.00 5.60 mg/L 109 0.13 Dilution Factor: 1 Analysis Time..: 08:00 WO#: ENV3F1A5-MS/ENV3F1A6-MSD MS Lot-Sample #: D1K130267-003 Chloride MCAWW 325.2 11/16/01 1324257 97 50.0 129 mg/L 80.8 0.50 MCAWW 325.2 11/16/01 1324257 99 50.0 130 mg/L 80.8 Dilution Factor: 1 Analysis Time..: 13:00 WO#: ENV3F1A3-MS/ENV3F1A4-MSD MS Lot-Sample #: D1K130267-003 Nitrate-Nitrite MCAWW 353.2 11/14/01 1319419 96 ND 5.00 4.87 mg/L 11/14/01 1319419 5.00 4.92 mq/L 97 1.0 MCAWW 353.2 ND Dilution Factor: 1 Analysis Time..: 08:00 WO#: EN1111AV-MS/EN1111AW-MSD MS Lot-Sample #: D1K150147-001 Sulfate MCAWW 375.4 11/26/01 96 133q 25.0 34.2 ma/L 10.3 11/26/01 1.1 MCAWW 375.4 1330633 94 25.0 33.8 mq/L 10.3 Dilution Factor: 1 Analysis Time..: 12:30 WO#: ENV371A1-MS/ENV371A2-MSD MS Lot-Sample #: D1K130267-015 Total Organic Carbon 25.0 28.0 MCAWW 415.1 11/22-11/23/01 1330531 101 2.8 mg/L 0.88 MCAWW 415.1 11/22-11/23/01 1330531 25.0 28.2 mq/L 102 Dilution Factor: 1 Analysis Time..: 07:00 Total Organic Carbon WO#: EN16X1CM-MS/EN16X1CN-MSD MS Lot-Sample #: D1K150169-002 MCAWW 415.1 11/22-11/23/01 1330523 2.5 25.0 27.1 mg/L 99 11/22-11/23/01 1330523 97 1.9 MCAWW 415.1 2.5 25.0 26.6 mg/L Dilution Factor: 1 Analysis Time..: 00:00

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

Client Lot # ...: D1K130267

General Chemistry

Matrix....: WATER Work Order #...: ENV3L-SMP Client Lot #...: D1K130267

_ ENV3L-DUP

Date Sampled...: 11/11/01 10:35 Date Received..: 11/13/01

Initial Wgt/Vol: Dilution Factor: % Moisture....: PREPARATION-RPD

PREP DUPLICATE METHOD ANALYSIS DATE BATCH # RPD RESULT UNITS LIMIT PARAM RESULT

SD Lot-Sample #: D1K130267-006 Total Alkalinity

0.37 (0-10) MCAWW 310.1 11/19/01 1323547 mg/L 285 284

Analysis Time..: 14:00 Dilution Factor: 1

General Chemistry

Client Lot #:	D1K130267	Work C	order ‡	ŧ: ENI	R1K-SMP Matr R1K-DUP	ix: WATER	
Date Sampled: % Moisture: PARAM RESULT	100 DUPLICATE	Date F Diluti		RPD LIMIT	Initi	al Wgt/Vol: PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Alkalinity 164	166 m	g/L ntion Fact	0.74 or: 1	(0-10)	SD Lot-Sample #: MCAWW 310.1 lysis Time: 18:00	D1K120213-007 11/19/01	1323551

General Chemistry

Client Lot #...: D1K130267

Work Order #...: EN678-SMP

Matrix....: WATER

EN678-DUP

Date Sampled...: 11/16/01 16:10 Date Received..: 11/17/01

PREP

% Moisture....: 100

Dilution Factor:

Initial Wgt/Vol:

RPD DUPLICATE UNITS RPD

PREPARATION-

ANALYSIS DATE BATCH #

PARAM RESULT

RESULT

LIMIT

METHOD SD Lot-Sample #: D1K170141-002

Total Alkalinity 975

956

mg/L 1.9 (0-10) MCAWW 310.1

1325370 11/20/01

Dilution Factor: 1

Analysis Time..: 16:00

General Chemistry

Client Lot # ...: D1K130267

Work Order #...: ENV29-SMP

Matrix....: WATER

Date Sampled...: 11/11/01 08:15 Date Received..: 11/13/01

ENV29-DUP

% Moisture....:

Dilution Factor:

RPD

Initial Wgt/Vol:

PREP

DUPLICATE

RPD

PREPARATION-

PARAM RESULT Total Dissolved RESULT

LIMIT

ANALYSIS DATE SD Lot-Sample #: D1K130267-001

BATCH #

Solids

1040 G

910 G

mg/L

UNITS

13

(0-20) MCAWW 160.1

11/15/01

1319625

Dilution Factor: 2

Analysis Time..: 12:00

NOTE(S):

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

HOLD TIME REPORT

HOLD TIME REPORT

Lab: GCMS VOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif			Ana Hold	Extraction Date	Analysis Date	Method Description
D1K130267001	SK-1S	11/11/01	08:15							
	•	•	8260B		8		14		11/19/01 12	:34 VOA
D1K130267002	SK-1D	11/11/01	07:45							
			8260B		8		14		11/19/01 13	:53 VOA
D1K130267003	SK-2S	11/11/01	11:00							
·	•		8260B		8		14		11/19/01 14	:19 VOA
D1K130267004	SK-2D	11/11/01	11:30							
			8260B		8		14		11/19/01 14	:44 VOA
D1K130267005	SK-3S	11/11/01	10:05							
			8260B		8		14		11/19/01 15	:10 VOA
D1K130267006	SK-3D	11/11/01								
		•	8260B		9		14		11/20/01 13	:12 VOA
D1K130267007	SK-4S	11/11/01			•					
D1 W1 200 (200)	07/ 47		8260B		8		14		11/19/01 16	:03 VOA
D1K130267008	SK-4D	11/11/01			9		1 /			
D1 V1 20267000	cv_5c	11/11/01	8260B		9	•	14		11/20/01 13	:39 VOA
D1K130267009	SK-5S	11/11/01	12:05 8260B		8		14			5.5 1100
D1K130267010	SK-5D	11/11/01					14		11/19/01 16	:56 VOA
DIKI30207010	JK JD	11/11/01	8260B		9		14	•	11/20/01 11	. E.E. 1/07
D1K130267011	SK-6S	11/11/01			•				11/20/01 11	:JD VUA
		11/11/01	8260B		8		14		11/19/01 17	·46 VO2
D1K130267012	SK-10S	11/11/01					* *		11/19/01 1	.ac von
		,,,	8260B		8		14		11/19/01 18	:12 VOA
D1K130267013	SK-25D	11/11/01	13:00						12, 13, 01	
			8260B		. 8		14		11/19/01 19	:37 VOA
D1K130267014	SK-26S	11/11/01	13:30							
			8260B		8		14		11/19/01 19	:03 VCA
D1K130267015	SK-27S	11/11/01								
•			8260B	•	8		14		11/19/01 19	:19 VOA
D1K130267016	TB-04	11/11/01	00:00				•			
			8260B		8		14		11/19/01 19	:55 VOA
D1K130267017	TB-05	11/11/01	00:00							
			8260B		8		14		11/19/01 20	:21 VOA
D1K130267018	SK-28S	11/11/01	14:30							
		•.	8260B		8		14		11/19/01 20	:47 VOA

HOLD TIME REPORT

Lab: GC VOA

Lab ID #	Well ID '	Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date	Analysis Date		Method Description
D1K130267001	SK-1S	11/11/01	 08:15								
			SOP-175		10		14		11/21/01	03:10	
D1K130267002	SK-1D	11/11/01	07:45								
		1,	SOP-175		10		14	e e	11/21/01	03:12	
D1K130267003	SK-2S	11/11/01	11:00						•		
			SOP-175	٠	10		14		11/21/01	03:15	
			SOP-175		10		14		11/21/01	03:21	-
D1K130267004	SK-2D	11/11/01	11:30								
			SOP-175		10		14		11/21/01	03:27	
D1K130267005	SK-3\$	11/11/01	10:05								
			SOP-175		10		14		11/21/01	03:30	
D1K130267006	SK-3D	11/11/01	10:35								
		•	SOP-175		10	•	14		11/21/01	03:33	
D1K130267007	SK-4S	11/11/01	09:40								
•			SOP-175		10		14		11/21/01	03:35	
D1K130267008	SK-4D	11/11/01	15:15								
		- · · · ·	SOP-175		10		14		11/21/01	03:38	
130267009	SK-5S	11/11/01	12:05								
		-	SOP-175		10		14		11/21/01	03:41	
		•	SOP-175		10		14		11/21/01	03:47	
D1K130267010	SK-5D	11/11/01	12:35								
			SOP-175		10		14		11/21/01	03:53	
D1K130267011	SK-6S	11/11/01	7:15								
		•	SOP-175		10		14		11/21/01	03:56	
D1K130267012	SK-10S	11/11/01 1	4:15								
			SOP-175		10		14		11/21/01	04:02	•
D1K130267013	SK-25D	11/11/01 1	.3:00								
		•	SOP-175		10		14		11/21/01	04:09	
D1K130267014	SK-26S	11/11/01 1	3:30					•			
*			SOP-175		10		14		11/21/01	04:11	
D1K130267015	SK-27S	11/11/01 1						a .			
			SOP-175		10		14		11/21/01	04:15	
01K130267018	SK-28S	11/11/01 1	4:30								
			SOP-175		10		14		11/21/01	04:25	
			SOP-175		10		14		11/21/01	14:45	*

HOLD TIME REPORT

Lab: METALS

Lab ID # Well ID		Collection Date Method		Ext Dif	Ana Ext		Ana Hold	Extraction Date	Analysis Date		Method Description	
						—						
	D1K130267001	SK-1S	11/11/01	08:15 6010B		9		180				
										11/20/01	21:58	
		a 15		6010B		9		180		11/20/01	23:41	ICP
	D1K130267002	SK-1D	11/11/01					100				
	•			6010B		9		180		11/20/01	22:13	ICP
				6010B		9		180		11/20/01	23:56	ICP
	D1K130267003	SK-2S	11/11/01		•							
				6010B		9		180		11/20/01	22:17	ICP
			•	6010B		10		180		11/21/01	00:00	102
	D1K130267004	SK-2D	11/11/01	11:30								•
			v .	6010B		9		180		11/20/01	22:21	ICP
				6010B		10		180		11/21/01	00:04	ICP
	D1K130267005	SK-3S	11/11/01	10:05			÷					
				6010B		9	÷	180		11/20/01	22:24	ICP
				6010B		10		180		11/21/01	00:08	ICP
	D1K130267006	SK-3D	11/11/01	10:35						•		
				6010B		9		180		11/20/01	22:36	ICP
				6010B		10		180		11/21/01	00:19	ICP .
	D1K130267007	SK-4S	11/11/01	09:40								
			•	6010B		9		180		11/20/01	22:40	ICP
	•			6010B		10		180		11/21/01	00:23	ICP
	D1K130267008	SK-4D	11/11/01	15:15								
				6010B		9		180	•	11/20/01	22:44	ICP
				6010B		10		180		11/21/01	00:27	ICP
	D1K130267009	SK-5S	11/11/01	12:05								
	•.			6010B		9		180		11/20/01	22:47	ICP
				6010B		10		180	·	11/21/01	00:31	ICF
	D1K130267010	SK-5D	11/11/01	12:35								
				6010B		9		180		11/20/01	22:51	ICP
		•		6010B		10	*	180		-11/21/01	00:35	ICP .
	D1K130267011	SK-6S	11/11/01	07:15								
				6010B		9		180	,	11/20/01	22:55	ICP
				6010B		10		180	-	11/21/01		
	D1K130267012	SK-10S	11/11/01	14:15					÷	· · · · ·		
	*			6010B		9		180		11/20/01	22:59	ICP
				6010B		10		180		11/21/01		
	D1K130267013	SK-25D	11/11/01	13:00						11/21/01		
		•		6010B		9		180		11/20/01	23:03	ICP
				6010B		10		180		11/21/01		

HOLD TIME REPORT

Lab: METALS

Lab ID #	Well ID	Collection Date	Method	Ext Dif			Ana Hold	Extraction Date	Analysis Date		Method Description
D1K130267014	SK-26S	11/11/01 1:	3:30					*			
	•	· · · · · · · · · · · · · · · · · · ·	6010B		9	٠.	180		11/20/01	23:07	ICP
			6010B		10		180		11/21/01	00:50	ICF
D1K130267015	SK-27S	11/11/01 1	4:00							•	•
		•	6010B		9		180		11/20/01	23:10	ICP
			6010B		10		180		11/21/01	00:54	ICP
D1K130267018	SK-28S	11/11/01 14	1:30								
		•	6010B		9		180	•	11/20/01	23:22	ICP
			6010B		10	•	180		11/21/01	01:05	ICP

HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

Lab ID #	Well ID	Collection Date	Method	Ext An	a Ext f Hol	Ana i Hold	Extraction Date	Analysis Date		Method Description
D1K130267001	SK-1S	11/11/01 08	3:15							
:		,	310.1	, 8		14		11/19/01	14:00	Alkalınit
			310.1	8		. 14	•	11/19/01	14:00	Alkalinıt
			310.1	8		14		11/19/01	14:00	Alkalınıt
	•		415.1	· 1	2	28		11/23/01	04:00	
			325.2	5		28		11/16/01	13:00	
		,	353.2	3		28		11/14/01	08:00	Nitrate- Nitrite
	•		160.1	4		7		11/15/01	12:00	
•			375.4	. 1	5	28	•	11/26/01	12:30	
D1K130267002	SK-1D	11/11/01 0	7:45							
	,		310.1	8		14		11/19/01	14:00	Alkalinit
		•	310.1	8		14		11/19/01	14:00	Alkalinit
			310.1	. 8		14		11/19/01	14:00	Alkalinit
			415.1	1	2 .	. 28		11/23/01	04:00	
			325.2	5		28	• •	11/16/01	13:00	
			353.2	. 3		28		11/14/01	08:00	Nitrare- Nitrite
			160.1	4		7		11/15/01	12:00	TDS
			375.4	. 1	5	28		11/26/01	12:30	
D1K130267003	SK-2S	11/11/01 1	1:00							
			310.1	. 8		14		11/19/01	14:00	Alkalinit
			310.1	8		14	4	11/19/01	14:00	Alkalinit
	•		310.1	÷ 8		14		11/19/01	14:00	Alkalinit
			415.1	. 1	2	28		11/23/01	04:00	
			325.2	5		28	•	11/16/01	13:00	
•			353.2	. 3		28		11/14/01	08:00	Nitrate- Nitrite
•	,		160.1	4		7		11/15/01	12:00	
			375.4	1	5	28		11/26/01	12:30	
D1K130267004	SK-2D	11/11/01 1	1:30							
			310.1	8		14		11/19/01	14:00	Alkalinit
		,	310.1	8		14		11/19/01	14:00	Alkalinit
	,	•	310.1	8		14		11/19/01	14:00	Alkalinit
			415.1	1	2	28		11/23/01	05:00	
			325.2	5		28		11/16/01	13:00	
			353.2	3		28		11/14/01	08:00	Nitrate-
			160.1	4		7		11/15/01	12:00	Nitrite TD\$
			375.4	1	5	28		11/26/01		

HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

		Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction	Analysis Date		Method
Lab ID #	Well ID										Description
D1K130267005	SK-3S	11/11/01									
			310.1		8		14		11/19/01	14:00	Alkalinity
		-	310.1		8		14		11/19/01	14:00	Alkalinity
			310.1		8		14		11/19/01	14:00	Alkalinity
		•	415.1		12		28		11/23/01	05:00	
		÷	325.2		5		28		11/16/01	13:00	
			353.2		3		28	x ·	11/14/01	08:00	Nitrate- Nitrite
			160.1		4		7		11/15/01	12:00	
			375.4		15		28		11/26/01	12:30	
D1K130267006	SK-3D	11/11/01	10:35								
		• •	310.1		8		14		11/19/01	14:00	Alkalinity
			310.1		8		14		11/19/01	14:00	Alkalinity
		4	310.1	•	8		14		11/19/01	14:00	Alkalinity
			415.1.		12		28		11/23/01	05:00	
			325.2		5		28		11/16/01	13:00	
			353.2		3		28	•	11/14/01	08:00	Nitrate-
			160.1		4		7		11/15/01	12:00	Nitrite TDS
			375.4		15		28		11/26/01	12:30	
D1K130267007	SK-4S	11/11/01	09:40				Δ.				
		•	310.1		8		14		11/19/01	14:00	Alkalinity
			310.1		. 8		14				Alkalinity
		•	310.1		8		14				Alkalinity
			415.1		12		28		11/23/01	05:00	•
		*:	325.2		5		28		11/16/01	13:00	
		: 2	353.2		3		28	Y.	11/14/01	08:00	
			160.1		4		7 .		11/15/01	12:00	Nitilte TDS
			375.4		15		28		11/26/01		
D1K130267008	SK-4D	11/11/01	15:15								
		a i	310.1		8		14		11/19/01	14:00	Alkalinity
			310.1		8		14				Alkalinity
			310.1		8		14	š.			Alkalinity
		P	415.1		, 12		28		11/23/01		
			325.2		5		28		11/16/01		
	٠		353.2		3		. 28		11/14/01		Nitrate-
			160.1		4		7				Nitrite
		ĩ	375.4		15		28		11/15/01		TDS
		¥	3/3.4		13		20		11/26/01	12:30	

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif		Ana Hold	Extraction ·	Analysis Date		Method Description
D1K130267009	SK-5S	11/11/01	 12:05					. •			
			310.1		8	*	14	•	11/19/01	14:00	Alkalinity
			310.1		8		14		11/19/01	14:00	Alkalinit
			310.1		8		14		11/19/01	14:00	Alkalinity
			415.1		12		28		11/23/01	06:00	
		•	325.2		5		28		11/16/01	13:00	
•			353.2		3		28		11/14/01	08:00	Nitrate- Nitrite
			160.1		4		7		11/15/01	12:00	
			375.4		15		28		11/26/01	12:30	
D1K130267010	SK-5D	11/11/01	12:35								
1 •			310.1		8 -		14		11/19/01	14:00	Alkalinity
			310.1		8		14		11/19/01	14:00	Alkalinity
			310.1		8		14 •		11/19/01	14:00	Alkalinity
	•		415.1		12		28	• •	11/23/01	J6:00	
			325.2		5		28		11/16/01	13:30	
			353.2		3		28		11/14/01	08:00	Nitrate- Mitiite
			160.1		4		7		11/15/01	12:00	TDS
			375.4		15		28		11/26/01	12:30	
1K130267011	SK-6S	11/11/01 (7:15						-		•
			310.1		8		14		11/19/01	14:30	Alkalinity
			310.1		8		14		11/19/01	14:00	Alkalinity
			310.1		8		14	*	11/19/01	14:00	Alkalınıt
			415.1		12	*	28		11/23/01	06:00	
			325.2		5		28		11/16/01	13:00	
		9	353.2		3		28	e .	11/14/01	00:60	Nitrate- Nitrite
			160.1		4		7		11/15/01	12:00	
	-		375.4		15		28		11/26/01	12:30	
1K130267012	SK-10S	11/11/01 1	14:15								
			310.1		8		14	· .	11/19/01	14:00	Alkalimity
			310.1		8		14		11/19/01	14:00	Alkalinity
			310.1		8		14		11/19/01	14:30	Alkalinity
			415.1		12		28		11/23/01	J6:00	
	-		325.2		5		28		11/16/01	13:30	
			353.2	3	3		28		11/14/01	08:00	Nitrate- Nitiite
			160.1		4		7		11/15/01	12:00	TDS
			375.4		15		28		11/26/01	12:30	

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

Lab ID #	Well ID	Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date	Analysis Date		Method Description
D1K130267013	SK-25D	11/11/01 1	.3:00			-					2
			310.1		8		14		11/19/01	14:00	Alkalinity
		4 5	310.1		8		14				Alkalinity
		•	310.1		8	*	14		11/19/01	14:00	Alkalinity
	,	н	415.1		12		28		11/23/01		
		at	325.2		5	_	28		11/16/01	13:00	
			353.2		3	•	28	·	11/14/01	08:00	Nitrate- Nitrite
		2	160.1		4	•	7		11/15/01	12:00	
			375.4	•	15		28		11/26/01	12:30	
D1K130267014	SK-26S	11/11/01 1	3:30								
	A	•	310.1		8		14		11/19/01	18:00	Alkalinity
			310.1		8		14		11/19/01	18:00	Alkalinity
			310.1		8		14		11/19/01	18:00	Alkalinity
		-	415.1		12		28		11/23/01	07:00	
		ŧ	325.2		5		28	•	11/16/01	13:00	
		\$"	353.2		3		28		11/14/01	08:00	
			160.1		4		7		11/15/01	12:00	Nitrite TDS
			375.4		15		28		11/26/01	12:30	
D1K130267015	SK-27S	11/11/01 1	4:00								
			310.1		8		14		11/19/01	18:00	Alkalinity
		·	310.1		8		14		11/19/01	18:00	Alkalinity
		-1	310.1		8		14		11/19/01	18:00	Alkalinity
	yd.		415.1		12		28		11/23/01	07:00	
			325.2		5		28		11/16/01	13:00	
		V .	353.2		3		28		11/14/01	08:00	Nitrate- Nitrite
	•		160.1		4		7		11/15/01	12:00	
			375.4		15		28		11/26/01	12:30	
D1K130267018	SK-28S	11/11/01 14	1:30								
		- -:	310.1		,9		14		11/20/01	16:00	Alkalinity
			310.1		9		14		11/20/01	16:00	Alkalinity
		` n	310.1		9		14		11/20/01	16:00	Alkalinity
	•	a.	415.1		12		28		11/23/01	18:00	
		 	325.2		5		28	•	11/16/01	13:00	
			353.2		3		28		11/14/01	08:00	Nitrate- Nitrite
			160.1	¥	4		7		11/15/01	12:00	
			375.4		15		28		11/26/01	12:30	

Chain of Custody Record

STL Denver 4955 Yarrow Street Arvada, CO 80002



Severn Trent Laboratories, Inc.

STL-4124 (1200) DEN (0900)											_					Date						Tc	hain	of Custody	Numb	er		
Client Classic Classic Laboration	Gill	Project M	lanager V '1	بمرور دی	che	3/	60	Hins		- (n cels	ٔ م)		1	Dan	14	/12	10	1				090				
) glety-Klein (WRM/A)-IR.	Tucility	Telephon	<u>/</u> e Numbe	er (Area	Code).	T /Fax N	Vumbe	er	100		50) -	£_/	<u></u>				Nun				-	1			, ,			
2549 North Now York A	renve	303	- 938	-55	35	/ :	303	-93	8-	<u>5 J.</u>	<u> 20</u>	<u>ソ</u>	10/2/2 1/2/2/2		-							<u> F</u>	Page			<u>f</u>		=
Client Safety Kleen (Wichitz) Inc. Address 2549 North New York As City Wichitz KS C	Code 7219	Site Cont	se[[])	unn	4	ab C	ontact <u>%C</u>	You	101		╌	16						ach i s nee	ist if ded,	,) 	T	Τ	-					
Project Name and Location (State) S-K Wichila Fucility Wichila Contract/Purchase Order/Quote No.	Ks	Carrier/M	/aybill Nu	ımber								_[_	1	ξ.	MEPTOR	Morw	₹ ×	7/1/3/	ľ					Specia Conditi	ıl Inst	ructio	ns/	
Contract/Purchase Order/Quote No.)		М	latrix				ntaine serva			╝.		77/1	2 -	~ I ~	Paylo!		;						Conun	UIIS C	ii Nec	cipi	
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Arr Aqueous	Soil		Unpres	HZSO4 HNOS	_	NaOH ZpAC/	Nao H	>-	_	_	` -	201	3	3		-	_	-	_	\downarrow					
5k-15	11/11/01	0815	X	_)		6						3	Ц		4	-	_	1	\perp	\downarrow	\perp					
5k-1D	}	0745	X		1	1	/ -	6		1	2	3		3	1						_	\perp						
5K-2S			X			1	1	6		2	<u>.</u>] .	}		3	}	1	1											
3K-2D			X			1	i	6		1	2	3	Ì	3	i	ι ,	71						.					<u> </u>
SK-35		-	\frac{1}{X} 		1 1	1	1	6			2	3	1	3	١	7	1					T						_
	*	-	1×	\dashv	+	$\dot{1}$;	6				3	i	3	ή	1	1					\top	\top					
3K-3D		 	- 		+	$\frac{\cdot}{1}$; -	1/				3		2	\dot{i}	1	7		+	1	\dagger	+	十					
5k-45			- /		+	' '	<u>'</u>	0	\vdash			3	i	<u>}</u>	}	+	,	\dashv	╁	+	- -	+	+					
SK-4D		<u> </u>	<u> </u>		4-4	4	1	6						왺	-	-	1	\dashv	+	-	-	+	+			· ·		
5K-55		·	<u> </u>					6				3	<u>! .</u>	<i>y</i>	1	1	Ц	\dashv	_		-	+	+					
5K.ED			X			1	1	6			2	3	-	3	1	1	1		_	_	_	\bot	\bot					
5K-68		0715	X			1	1	6			2	3	1	3	1	1	1	.	\perp	_	1	\bot	\perp					
SK-105	V	1415	X			1	1	6			2	3	1	3	1	j	1	l.				\perp	\bot					· ·
Possible Hazard Identification	·L			le Dispo										•				,						if samples	are ret	ained		
Non-Hazard 🔲 Flammable 🔲 Skin Irritant	Poison B	☐ Unknown	☐ Re	eturn To	Client			posal i equire				Archiv	ve Fo	or			Monti	hs i	onge	r tha	п 3 п	ionin	15)					
Turn Around Time Required	ays 🔲 21 Da	ays 🗌 Oth	or			- 1	QC M	еципе	nems	(Opc.	chy,																	
24 Hours 48 Hours 7 Days 14 D	ays 🗀 21 Da	Date	<u></u>	Time		=	1. Red	ceived	Ву			1/1	<u>` </u>	_										ale I		īme .		,
1 Relinquished H. Coverda		21/1	2/0/	18	100		<u> </u>	ceived	en	- 1		-	an	4									$\frac{1}{2}$	1/13/0		/o/	<u> </u>	
2. Relinquished By		Date		Time			2 Re	eived	Ву							*							0,	ate *		rime		
3. Relinquished By		Date		Time			3 Re	ceived	Ву															ate		Тіте		
Common Plance call Kay To	uscher	1 Mmp	diate	y K - Eigh	VY 1 Coor	1/2	6	40	109	tio	צח	í)	. 15-	 .

Chain of Custody Record

STL Denver 4955 Yarrow Street Arvada, CO 80002



Severn Trent Laboratories, Inc.

STL-4124 (1200) DEN (0900)																												•	
Client Safety - Klew. (Wichity) Inc, I Address 2549 North New York Aug City Wichita State Zip Wichita	Sacility	Project K Teleph	Mana Cry	ger Ta	1451	che	C(C	: 11-81	ish	-(C 14	٤)							/12	10,	/		7	Chain c	090	Numbe	6	
2549 North New York Aug	enve	Teleph	one Ni 3/23-	umbei - 43	r (Area g –	553	e)/Fa	x Nu	mber シンテ) _ i	139.	-55	20	>		?		La	b Nu	mber				١,	Page		O f		
City Wichitz State Zip	Code 57217	Site Co	1673- Intact 16-21	Du	nn		Lab	Con KC	tact	101	Series Series	`			3,7		Ana	aliasi eksp	NA ace	ttach is ne	list i	if d)							
Project Name and Location (State) SK Wichitu Fucility Wichit Contract/Purchase Order/Quote No.		Carrier	Wayb	ill Nur	mber		<u> </u>			01				BOTCH		.	江	\.\ \.\	6050							Special	Inetr	uction	c/
Contract/Purchase Order/Quote No.		-		Ма	trix				Conta Prese	rva	tives	S	_ 1		/HE/c	Dissolved Mertals	100	WH3	1/2/10							Conditio			
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Αur	Aqueous	Soil Sed		Unpres	H2S04	HNOS	HČ	NaOH	ZnAc/ NaOH	1,4	100	TDS/	D.SSalv	Toto!	12	D,35							,			
SK-25D	11-11-01	1300		X			l		MCX.				2	3	1	1	1	1	3										
SK-265	11-11-01	1330		1			1	1		6	,		2	3	İ	1	1	1	3								,		
5K-275	//-// -0 j	1400		X	_ _	_	1	ı	 	6			2	3	1	1	/	1	3		_		1			•			
TB Of	· ·		-	<u> </u>	_ _	ļ				3				3	_			_							<u> </u> .				
TB 05		 -		<						3				3	·														
5/1-285	illilai	1430	,	X			i	-		6			Z	3	1	/	/	/	3										
				_																						*			
	 				\bot																		<u> </u>	\perp					
										_											_		_	\perp					
				4.		ļ		4					_						.,		_		_			·-··			
Possible Hazard Identification					Dispo:																				<u> </u>				
Non-Hazard	☐ Poison B	Unknown	1_	. '	urn To		t		Dispos	al B	y La	b		Archi	ve F	or _		/	Month				be as 3 mc			samples ar	e retain	ed	
Turn Around Time Required	vs \square 21 Day	rs 🗆 Ott	er					QC	Requ	irem	ents	(Spe	cify)																
1 Relinquished By Hours 7 Days 14 Da	,	Date ///			Time 18	00		1. R	Receiv	ed E	ly L		/	No		y	,								Date	13/01	Tim	or<	
2 Relinquished By		Date			Time			2. R	Receiv	ed E	By					7									Date		Tim	e	=
3 Relinquished By		Date		Ì	Time			3. F	Receiv	ed E	Ву					•			·						Date		Tim	e	
Comments Please all Ky Truscher	with a	Ing W	ves	try	ı <i>J</i> ·										-					4		-			1				

COTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report, PINK - Field Copy



STL Denver

4955 Yarrow Street Arvada, CO 80002-4517

Tel: 303 736 0100 Fax: 303 431 7171 www.stl-inc.com

ANALYTICAL REPORT

SAFETY KLEEN (WICHITA, KS)

Lot #: D1K130262

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue, Suite 100 Boulder, CO 80301

SEVERN TRENT LABORATORIES, INC.

Kae E. Yoder Project Manager

December 5, 2001

This report shall not be reproduced except in full, without the written approval of the laboratory

Invoice

STL Denver

4955 Yarrow Street

Arvada,CO 80002

Tet: (303) 421-6611

Fax: (303) 431-7171

REMIT TO:

Bill To

Severn Trent Laboratories, Inc.

P.O. Box 7777 W4305

Philadelphia, PA 19175-4305

John Arbuthnot

Safety Kleen Inc

13351 Scenic Highway

Baton Rouge, LA 70807

SEVERN FRENT SERVICES

Number

28032948

Date

05 DEC 01

STL Project Number
D1K130262

Customer Number 00408171

Terms

NET 30 DAYS

Customer Contact

SAMPLE RECEIVING DATE : 11/13/01

REPORT DATE : 12/05/01

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue

Suite 100

Boulder, CO 80301

Line Na.	Ωty	Matrix Code	*	Analysis Description	Unit Price	Extended Price
	7	WATER	WATER,	Total Fe/Mn, 6010B	16.00	112.00
	7	WATER	WATER,	Dissolved Ca/Fe/K/Mg/Mn/Na, 6010B	48.00	336.00
	7	WATER	WATER,	Total Dissolved Solids, 160.1	8.00	56.00
	7	WATER	WATER,	Carbonate Alkalinity, 310.1	8.00	56.00
	7	WATER	WATER,	Chloride, 325.2	8.00	56.00
	7	WATER	WATER,	Nitrate-Nitrite, 353.2	8.00	56.00
	7	WATER	WATER,	Total Organic Carbon, 415.1	23.00	161.00
	7	WATER	WATER,	Sulfate, 375.4	10.00	70.00
	7	WATER	WATER,	Bicarbonate Alkalinity, 310.1	8.00	56.
	7	WATER	WATER,	Total Alkalinity, 310.1	8.00	56.
	7	WATER	WATER,	Ammonia Nitrogen, 350.1	8.00	56.00
	7	WATER	WATER,	Total Metals Digestion	3.00	21.00
	7	WATER	WATER,	Dissolved Metals Digestion	3.00	21.00
	7	WATER	WATER,	Dissolved Gases, RSK175	143.00	1,001.00
	9	WATER	WATER,	Volatile Organics, 8260B	97.00	873.00

NOTE: Applicable samples will be stored at no extra charge for a period of 30 days following the final report. Samples will be properly disposed of after 30 days, unless notified otherwise in writing.

COPY

Please reference Invoice number when remitting.

Customer P.O. Number / Contract Number / Reference

Salesperson

Sub Total Tax

Total

2,987.00

STL Project Manager Kae Yoder

DUPLICATE

Severn Trent Laboratories, Inc.

Table Of Contents

Standard Deliverables

Report Contents

Total Number of Pages

Standard Deliverables

The Cover Letter and the Report Cover page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.

- Table of Contents
- Case Narrative
- Executive Summary Detection Highlights
- Methods Summary
- Method/Analyst Summary
- Lot Sample Summary
- Analytical Results
- QC Data Association Summary
- Hold Time Report
- Chain-of-Custody



CASE NARRATIVE

Client Name:

Safety-Kleen (Wichita)

Project Name: Project Number:

Sample Delivery Group:

D1K130262

Narrative Date:

12/05/01

Sample Receipt

- Seven water samples, one rinse blank and one field blank, submitted by Safety-Kleen (Wichita), Inc., were received by STL Denver on November 13, 2001, according to documented sample acceptance procedures. The samples were received intact at temperatures of 4.9°C, 4.8°C, 3.8°C, 3.4°C, 3.4°C and 3.6°C. Analyses requested on the associated chains-of-custody are as follows: GC/MS Volatiles, Dissolved Gases, Total Metals, Dissolved Metals and General Chemistry.
- As instructed by the client, the samples were analyzed for Sulfate Method 375.4, Ammonia as Nitrogen Method 350.1, and Nitrate-Nitrite Method 353.2 in addition to the other requested analyses, as the information on the chain-of-custody is incomplete.
- > Sampling dates and times were taken directly from the sample container labels for several samples, as this information was not provided on the chain-of-custody.
- > The Dissolved Gases analyses presented in this report were performed at the STL Austin facility.
- No other anomalies were encountered during sample receipt.

GC/MS Volatiles

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs. with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
SK-11S	1,1-Dichloroethane	2.0	1.0	ug/L
	1,1-Dichloroethene	1.4	1.0	ug/L
·	cis-1,2-Dichloroethene	32	1.0	ug/L
	Tetrachloroethene	3.9	1.0	ug/L
	1,1,1-Trichloroethane	8.3	1.0	ug/L
	Trichloroethene	16	1.0	ug/L
HRI-03	Carbon Tetrachloride	6.4	4.0	ug/L
	cis-1,2-Dichloroethene	21	· 4.0	ug/L
	Trichloroethene	120	4.0	ug/L
WND-32	Carbon tetrachloride	6.6	1.0	ug/L
-	Chloroform	32	1.0	ug/L
	cis-1,2-Dichloroethene	1.1	1.0	ug/L
	Methylene chloride	1.0	1.0	ug/L
	Trichloroethene	11	1.0	ug/L
MW-11	: 1,2,4-Trimethylbenzene	1.6	1.0	ug/L
·	Isopropylbenzene	1.4	1.0	ug/L
	n-Propylbenzene	2.0	1.0	ug/L
	sec-Butylbenzene	2.5	1.0	ug/L
RSCI-1	Trichloroethene	4.9	1.0	ug/L

- > The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. In some cases, due to interference or analytes present above the linear calibration curve. samples had to be analyzed at a dilution. For samples analyzed at a dilution, the reporting limits have been adjusted relative to the dilution required. The following table details the associated dilutions.

Sample ID		Dilution
HRI-03		1:4
MW-10		1:40
MW-14	-	1:40

The method required MSD could not be performed for QC batch 1331356, due instrument failure. The associated MS data has been reported. All spike parameters were within QC control limits. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data.

Dissolved Gases

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
SK-11S	Methane	3.1	0.50	ug/L
HRI-03	Methane	2.9	0.50	ug/L
WND-32	Methane	1.5	0.50	ug/L
MW-10	Ethane	0.60	0.50	ug/L
	Methane	610 E	0.50	ug/L
MW-10 RE	Methane	1900	25	ug/L
MW-11	Methane	680 E	0.50	ug/L
MW-11 RE	Methane	2700	50	ug/L
MW-14	Methane	500 E	0.50	ug/L
MW-14 RE	Methane	720	5.0	ug/L
RSCI-1	Methane	1.1	0.50	ug/L ug/L

- > The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Samples MW-10, MW-11 and MW-14 exhibited concentrations that were above the linear calibration curve for Methane. The associated results in the analytical report have been flagged with an "E", as these are estimated results. Upon re-preparation and reanalysis of the samples at the necessary dilutions, all quality control acceptance criteria were met. Both the original and reanalysis data have been provided for comparison.
- The method required MS/MSD could not be reported for QC batch 1332458, due to system batching limitations. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data.

Total and Dissolved Metals

Sample analysis revealed detectable concentrations at or above Safety-Kleen (Wichita)'s RLs, as detailed in the Executive Summary-Detection Highlights Report. The samples were analyzed within holding time and without incident, with the exception of the following items noted.

> Standard batch MS/MSD has been provided. Percent recoveries and RPD data could not be calculated, for the Dissolved Calcium MS/MSD associated with QC batch 1319418, due to the sample concentrations reading greater than four times the spike amount.

General Chemistry

- > Sample analysis revealed detectable concentrations at or above Safety-Kleen (Wichita)'s RLs, as detailed in the Executive Summary-Detection Highlights Report. The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Each sample was analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high target constituent concentration, the Sulfate analyses for samples SK-11S, HRI-03, WND-32, MW-11, MW-14 and RSCI-1 were performed at a 1:5 dilution. Associated results in the analytical report have been flagged with a "Q" and the reporting limits have been adjusted relative to the dilution required.
- > Due to matrix interference, the Total Dissolved Solids analyses for samples SK-11S, WND-32, MW-10, MW-11 and MW-14 were performed at a dilution. Results in the analytical report have been flagged with a "G", and the reporting limit has been adjusted relative to the dilutions required.
- ➤ Please note that the Ammonia Nitrogen MS/MSD associated with QC batch 1319322 also supports QC batch 1319321. In addition, the Total Organic Carbon MS/MSD associated with QC batch 1330523 also supports QC batch 1330527.

These data and reporting limits are being used specifically to meet the needs of this project. All RLs are supported by STL Denver's Method Detection Limits (MDLs). Reporting limits in this report are at or above the MDL.

I certify that the data presented in this report are accurate, complete, and meets the minimum quality assurance standards in 40-CFR 136, 40-CFR 141, and/or SW846. The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. An assessment of the quality of the data, noting any exceptions, outliers, and/or problems encountered have been narrated herein.

Kae E. Yoder

Project Manager

Date

D1K130262

		DEDODETA	1 0	
DADAMENTO	DECIH W	REPORTIN		ANALYTICAL
PARAMETER	RESULT	LIMIT	UNITS	METHOD
SK-11S 11/11/01 14:45 001		e e		
Methane	3.1	0.50	ug/L	RSK SOP-175
Calcium - DISSOLVED	66.0	0.20	mg/L	SW846 6010B
Magnesium - DISSOLVED	21.6	0.20	mg/L	SW846 6010B
Manganese - DISSOLVED	0.75	0.010	mg/L	SW846 6010B
Sodium - DISSOLVED	166	5.0	mg/L	SW846 6010B
Iron	0.20	0.10	mg/L	SW846 6010B
Manganese	0.65	0.010	mg/L	SW846 6010B
1,1-Dichloroethane	2.0	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	1.4	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	32	1.0	ug/L	SW846 8260B
Tetrachloroethene	3.9	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	8.3	1.0	ug/L	SW846 8260B
Trichloroethene	16	1.0	ug/L	SW846 8260B
Total Dissolved	704 G	40.0	mg/L	MCAWW 160.1
Solids				
Chloride	61.2	2.5	mg/L	MCAWW 325.2
Nitrate-Nitrite	1.7	0.10	mg/L	MCAWW 353.2
Total Organic Carbon	5.0	1.0	mg/L	MCAWW 415.1
Sulfate	193 Q	25.0	mg/L	MCAWW 375.4
Bicarbonate Alkalinity	351	5.0	mg/L	MCAWW 310.1
Total Alkalinity	351	5.0	mg/L	MCAWW 310.1
HRI-03 11/11/01 09:15 003	•			
Methane	2.9	0.50	ug/L	RSK SOP-175
Calcium - DISSOLVED	133	0.20	mg/L	SW846 6010B
Magnesium - DISSOLVED	52.3	0.20	mg/L	SW846 6010B
Manganese - DISSOLVED	0.28	0.010	mg/L	SW846 6010B
Sodium - DISSOLVED	50.5	5.0	mg/L	SW846 6010B
Iron	0.33	0.10	mg/L	SW846 6010B
Manganese	0.34	0.010	mg/L	SW846 6010B
Carbon tetrachloride	6.4	4.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	21	4.0	ug/L	SW846 8260B
Trichloroethene	120	4.0	ug/L	SW846 8260B
Total Dissolved Solids	798	10.0	mg/L	MCAWW 160.1
Chloride	73.0	2.5	mg/L	MCAWW 325.2
Nitrate-Nitrite	2.2	0.10	mg/L	MCAWW 353.2
Total Organic Carbon	2.6	1.0	mg/L	MCAWW 415.1
Sulfate	215 Q	25.0	mg/L	MCAWW 375.4
Bicarbonate	338 .	5.0	mg/L	MCAWW 310.1
Alkalinity	-			

D1K130262

٠.		•				
	•			REPORTIN	1G	ANALYTICAL
	PARAMETER		RESULT	LIMIT	UNITS	METHOD
HRI-03	11/11/01 09:15 003					
	Total Alkalinity		338	5.0	mg/L	MCAWW 310.1
WND-32	11/11/01 13:20 004					
	Methane		1.5	0.50	ug/L	RSK SOP-175
	Calcium - DISSOLVED		124	0.20	mg/L	SW846 6010B
	Potassium - DISSOLVED		5.6	3.0	mg/L	SW846 6010B
,	Magnesium - DISSOLVED		30.6	0.20	mg/L	SW846 6010B
	Manganese - DISSOLVED		3.3	0.010	mg/L	SW846 6010B
	Sodium - DISSOLVED		78.8	5.0	mg/L	SW846 6010B
	Iron		42.4	0.10	mg/L	
	Manganese		1.4	0.10	mg/L	SW846 6010B SW846 6010B
	Carbon tetrachloride		6.6	1.0	ug/L	
	Chloroform		32	1.0	-	SW846 8260B
	cis-1,2-Dichloroethene		1.1	1.0	ug/L ug/L	SW846 8260B
	Methylene chloride		1.0	1.0	ug/L ug/L	SW846 8260B
	Trichloroethene		11	1.0	ug/L	SW846 8260B
	Total Dissolved		925 G	50.0	mg/L	SW846 8260B
	Solids		923 G	50.0	mg/L	MCAWW 160.1
	Chloride		68.7	2.5	mg/L	MCAWW 325.2
	Nitrate-Nitrite		6.3	0.10	mg/L	MCAWW 353.2
	Total Organic Carbon		2.5	1.0	mg/L	MCAWW 415.1
	Sulfate		138 Q	25.0	mg/L	MCAWW 375.4
•	Bicarbonate Alkalinity		310	5.0	mg/L	MCAWW 310.1
	Total Alkalinity		310	5.0	mg/L	MCAWW 310.1
MW-10 1	1/11/01 16:40 005					
:	Ethane		0.60	0.50	ug/L	RSK SOP-175
. 1	Methane		610 E	0.50	ug/L	RSK SOP-175
	Methane		1900 D	25	ug/L	RSK SOP-175
. (Calcium - DISSOLVED	,	94.8	0.20	mg/L	SW846 6010B
	Iron - DISSOLVED		2.2	0.10	mg/L	SW846 6010B
	Potassium - DISSOLVED		3.3	3.0	mg/L	
	Magnesium - DISSOLVED		26.3	0.20	mg/L	SW846 6010B SW846 6010B
	Manganese - DISSOLVED		1.2	0.20	mg/L	
	Sodium - DISSOLVED		70.6	5.0	mg/L	SW846 6010B
	Iron		391	0.10	mg/L	SW846 6010B SW846 6010B
	Manganese		7.1	0.010	mg/L	
	Total Dissolved		940 G	200	_	SW846 6010B
•	Solids		740 G	200	mg/L	MCAWW 160.1
	Chloride		39.9	2.5	mg/L	MCAWW 325.2

D1K130262

ı				
PARAMETER		REPORTI		ANALYTICAL
PARAMETER	RESULT	LIMIT	UNITS	METHOD
MW-10 11/11/01 16:40 005				
		*		
Nitrate-Nitrite	0.15	0.10	mg/L	MCALILI 2E2 2
Total Organic Carbon	3.5	1.0	mg/L	MCAWW 353.2
Bicarbonate	448	5.0	mg/L	MCAWW 415.1
Alkalinity		5.0	mg/ Li	MCAWW 310.1
Total Alkalinity	448	5.0	mg/L	MODERA DA O
Ammonia as N	0.30	0.10	mg/L	MCAWW 310.1 MCAWW 350.1
MW-11 11/11/01 12:55 '006		••••	g/ 11	MCAWW 350.1
Methane	. 680 E	0.50	11 <i>0</i> 7 /T	DOV COD 355
Methane	2700 D	50	ug/L	RSK SOP-175
Calcium - DISSOLVED	135	0.20	ug/L	RSK SOP-175
Iron - DISSOLVED	1.7	0.20	mg/L	SW846 6010B
Potassium - DISSOLVED	3.2		mg/L	SW846 6010B
Magnesium - DISSOLVED	17.1	3.0	mg/L	SW846 6010B
Manganese - DISSOLVED	0.86	0.20	mg/L	SW846 6010B
Sodium - DISSOLVED	24.3	0.010	mg/L	SW846 6010B
Iron		5.0	mg/L	SW846 6010B
Manganese	93.0	0.10	mg/L	SW846 6010B
1,2,4-Trimethylbenzene	1.4	0.010	mg/L	SW846 6010B
Isopropylbenzene	1.6	1.0	ug/L	SW846 8260B
n-Propylbenzene ·	1.4	1.0	ug/L	SW846 8260B
sec-Butylbenzene	2.0	1.0	ug/L	SW846 8260B
Total Dissolved	2.5	1.0	ug/L	SW846 8260B
Solids	595 G	50.0	mg/L	MCAWW 160.1
Chloride	16.0			
Nitrate-Nitrite	10.2	2.5	mg/L	MCAWW 325.2
Total Organic Carbon	0.46	0.10	mg/L	MCAWW 353.2
Sulfate	3.6	1.0	mg/L	MCAWW 415.1
Bicarbonate	203 Q	25.0	mg/L	MCAWW 375.4
Alkalinity	257	5.0	mg/L	MCAWW 310.1
Total Alkalinity				
Ammonia as N	257	5.0	mg/L	MCAWW 310.1
Annonia as N	0.13	0.10	mg/L	MCAWW 350.1
MW-14 11/11/01 16:15 007	•			
Methane	E00 T			
Methane -	500 E	0.50	ug/L	RSK SOP-175
Calcium - DISSOLVED	720 D	5.0	ug/L	RSK SOP-175
Iron - DISSOLVED	136	0.20	mg/L	SW846 6010B
Potassium - DISSOLVED	8.4	0.10	mg/L	SW846 6010B
Magnesium - DISSOLVED	3.0	3.0	mg/L	SW846 6010B
Manganese - DISSOLVED	36.1	0.20	mg/L	SW846 6010B
Handanese - DISSOUVED	3.1	0.010	mg/L	SW846 6010B

D1K130262

	•		REPORTING		ANALYTICAL
•	PARAMETER	RESULT	LIMIT	UNITS	METHOD
					*
MW-14	11/11/01 16:15 007				
	Sodium - DISSOLVED	51.6	5.0	mg/L	SW846 6010B
	Iron	396	0.10	mg/L	SW846 6010B
	Manganese	6.2	0.010	mg/L	SW846 6010B
	Total Dissolved Solids	540 G	200	mg/L	MCAWW 160.1
	Chloride	43.4	2.5	mg/L	MCAWW 325.2
	Nitrate-Nitrite	0.18	0.10	mg/L	MCAWW 353.2
	Total Organic Carbon	4.5	1.0	mg/L	MCAWW 415.1
	Sulfate	40.7	5.0	mg/L	MCAWW 375.4
	Bicarbonate	496	5.0	mg/L	MCAWW 310.1
	Alkalinity				
	Total Alkalinity	496	5.0	mg/L	MCAWW 310.1
	Ammonia as N	0.37	0.10	mg/L	MCAWW 350.1
RSCI-1	. 11/11/01 08:45 008		•	•	
	Methane	1.1	0.50	ug/L	RSK SOP-175
	Calcium - DISSOLVED	143	0.20	mg/L	SW846 6010B
	Magnesium - DISSOLVED	57.1	0.20	mg/L	SW846 6010B
	Manganese - DISSOLVED	0.16	0.010	mg/L	SW846 6010B
	Sodium - DISSOLVED	53.3	5.0	mg/L	SW846 6010B
	Iron	4.2	0.10	mg/L	SW846 6010B
	Manganese	0.50	0.010	mg/L	SW846 6010B
	Trichloroethene	4.9	1.0	ug/L	SW846 8260B
	Total Dissolved	858	10.0	mg/L	MCAWW 160.1
	Solids			5/ =	110111111 100,1
	Chloride	79.1	2.5	mg/L	MCAWW 325.2
	Nitrate-Nitrite	3.2	0.10	mg/L	MCAWW 353.2
	Total Organic Carbon	1.9	1.0	mg/L	MCAWW 415.1
ř	Sulfate	231 Q	25.0	mg/L	MCAWW 375.4
	Bicarbonate	337	5.0	mg/L	MCAWW 310.1
	Alkalinity				
•	Total Alkalinity	337	5.0	mg/L	MCAWW 310.1

METHODS SUMMARY

D1K130262

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Alkalinity Bicarbonate Alkalinity Carbonate Alkalinity Chloride (Colorimetric, Automated Ferricyanide) Dissolved Gases in Water Filterable Residue (TDS) Inductively Coupled Plasma (ICP) Metals Inductively Coupled Plasma (ICP) Metals Nitrate-Nitrite Nitrogen, Ammonia	MCAWW 310.1 MCAWW 310.1 MCAWW 325.2 RSK SOP-175 MCAWW 160.1 SW846 6010B SW846 6010B MCAWW 353.2 MCAWW 350.1	MCAWW 310.1 MCAWW 310.1 MCAWW 310.1 MCAWW 325.2 EPA-9 RSK-175 MCAWW 160.1 SW846 3005A SW846 3010A MCAWW 353.2 MCAWW 350.1
Sulfate Total Organic Carbon Volatile Organics by GC/MS	MCAWW 375.4 MCAWW 415.1 SW846 8260B	MCAWW 375.4 MCAWW 415.1 SW846 5030B/826

References:

MCAWW	"Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.
RSK	Sample Prep and Calculations for Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibration Technique, RSKSOP-175, REV. 0, 8/11/94, USEPA Research Lab
SW846	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

D1K130262

ANALYTICAL		ANALYST
METHOD	ANALYST	ID
MCAWW 160.1	Lisa Finkle	003889
MCAWW 310.1	Ewa Kudla	001167
MCAWW 325.2	Maria Fayard	002596
MCAWW 350.1	Sara Agner	008534
MCAWW 353.2	Sara Agner	008534
MCAWW 375.4	Maria Fayard	002596
MCAWW 415.1	Dave Elkin	000901
RSK SOP-175	William Jaycox	800012
SW846 6010B	Lynn-Anne Trudell	006645
SW846 6010B	Steve Mustain	006720
SW846 8260B	Dan Appelhans	001008
SW846 8260B	Mark McDaniel	000998
References:		
MCAWW "Methods EPA-600/	for Chemical Analysis of Water and Waster $^\prime$ 4-79-020, March 1983 and subsequent revis	s", ions.
in Water	Prep and Calculations for Dissolved Gas And Samples Using a GC Headspace Equilibration (e, RSKSOP-175, REV. 0, 8/11/94, USEPA Rese	on
SW846 "Test Me Methods"	thods for Evaluating Solid Waste, Physical, Third Edition, November 1986 and its upo	l/Chemical dates.

SAMPLE SUMMARY

D1K130262

WO #	SAMPLE#	CLIENT	SAMPLE	ID	SAMPLED DATE	SAMP TIME
ENVOR ENV1J ENV1K ENV10 ENV11 ENV14 ENV16 ENV18	001 002 003 004 005 006 007 008	SK-11S RB-1111 HRI-03 WND-32 MW-10 MW-11 MW-14 RSCI-1 FB-1111	- - -		11/11/01 11/11/01 11/11/01 11/11/01 11/11/01 11/11/01 11/11/01	14:45 14:50 09:15 13:20 16:40 12:55 16:15 08:45
DIV 2 A		rb-1111	.01		11/11/01	14:55

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Client Sample ID: SK-11S

GC/MS Volatiles

Lot-Sample #...: D1K130262-001 Work Order #...: ENVOR1AA
Date Sampled...: 11/11/01 14:45 Date Received..: 11/13/01

Matrix.....: WATER

 Prep Date....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325424
 Analysis Time...:
 14:55

Method.....: SW846 8260B

PARAMETER	Diagram m	REPORT	ING
Benzene	RESULT ND	LIMIT	UNITS
Bromobenzene		1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
n-Butylbenzene	ND	2.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Chloroform	, ND	2.0	ug/L
Chloromethane	ND	1.0	ug/L
2-Chlorotoluene	ND	2.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND ND	1.0	ug/L
1,4-Dichlorobenzene	ND ND	1.0	ug/L
Dichlorodifluoromethane	ND ND	1.0	ug/L
1,1-Dichloroethane	2.0	2.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	1.4	1.0	ug/L
cis-1,2-Dichloroethene	32	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	0.50	ug/L
1,3-Dichloropropage	ND	1.0	${\tt ug/L}$
2,2-Dichloropropane	ND	1.0	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
Hexachlorobutadiene	ND	2.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
	-	1.0	ug/L

Client Sample ID: SK-11S

Lot-Sample #.	: D1K	130262-001	Work Order	#:	ENV0R1AA	Matrix:	WATER
---------------	-------	------------	------------	----	----------	---------	-------

			REPORTING			
PARAMETER	ž.	RESULT	LIMIT	UNITS		
n-Propylbenzene		ND	1.0	ug/L		
Styrene		ND	1.0	ug/L		
1,1,1,2-Tetrachloroetha	ine	ND	1.0	ug/L		
1,1,2,2-Tetrachloroetha	ine	ND	1.0	ug/L		
Tetrachloroethene		3.9	1.0	ug/L		
Toluene	:	ND	1.0	ug/L		
1,2,3-Trichlorobenzene		ND	. 1.0	ug/L		
1,2,4-Trichloro-	*	· ND	1.0	ug/L		
benzene	.3			-3, -		
1,1,1-Trichloroethane		8.3	1.0	ug/L		
1,1,2-Trichloroethane		ND	1.0	ug/L		
Trichloroethene		16	1.0	ug/L		
1,2,3-Trichloropropane		ND	1.0	ug/L		
1,2,4-Trimethylbenzene	~	ND	1.0	ug/L		
1,3,5-Trimethylbenzene	•	ND	1.0	ug/L		
Vinyl chloride		ND	1.0	ug/L`		
o-Xylene		ND	1.0	ug/L		
m-Xylene & p-Xylene		ND	2.0	ug/L		
1,2-Dibromo-3-		ND	2.0	ug/L		,
chloropropane (DBCP)			·	٠.		
1,2-Dibromoethane (EDB)	7	ND	1.0	ug/L		
		PERCENT	RECOVERY			
SURROGATE		RECOVERY	LIMITS			
Dibromofluoromethane		110	(80 - 120)			
1,2-Dichloroethane-d4		114	(72 - 127)	*		
4-Bromofluorobenzene		86	(79 - 119)	3		
Toluene-d8		93	(79 - 119)			-

Client Sample ID: RB-111101

GC/MS Volatiles

Lot-Sample #...: D1K130262-002 Work Order #...: ENV1J1AA Matrix..... WATER

Date Sampled...: 11/11/01 14:50 Date Received..: 11/13/01
Prep Date....: 11/20/01 Analysis Date..: 11/20/01
Prep Batch #...: 1325424 Analysis Time..: 15:19

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTING	,
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ʻug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	· ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: RB-111101

GC/MS Volatiles

Lot-Sample #: D1K130262-	Wollie Olde	r #: ENVIJIAA		••••••	WATER
PARAMETER	DDG:==	REPORTING	3		
n-Propylbenzene	RESULT ND	<u>LIMIT</u>	UNITS		
Styrene	ND	1.0	ug/L	-	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L		
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L		
Tetrachloroethene	ND	1.0	ug/L		
Toluene	ND ND	1.0	ug/L		
1,2,3-Trichlorobenzene	ND	1.0	ug/L		
1,2,4-Trichloro-	ND	1.0	ug/L	•	
benzene	1112	1.0	ug/L		
1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl chloride o-Xylene m-Xylene & p-Xylene 1,2-Dibromo-3- chloropropane (DBCP) 1,2-Dibromoethane (EDB)	ND ND ND ND ND ND ND ND ND ND ND ND	1.0 1.0 1.0 1.0 1.0 1.0 2.0 2.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L		
SURROGATE Dibromofluoromethane 1,2-Dichloroethane-d4 4-Bromofluorobenzene Foluene-d8	PERCENT RECOVERY 114 114 85 96	RECOVERY LIMITS (80 - 120) (72 - 127) (79 - 119) (79 - 119)	•		

(79 - 119)

Client Sample ID: HRI-03

GC/MS Volatiles

Lot-Sample #...: D1K130262-003 Work Order #...: ENV1K1AC Matrix...... WATER

Date Sampled...: 11/11/01 09:15 Date Received..: 11/13/01
Prep Date....: 11/20/01 Analysis Date..: 11/20/01
Prep Batch #...: 1325424 Analysis Time..: 21:36

Dilution Factor: 4

Method....: SW846 8260B

		REPORTING	G	
PARAMETER	RESULT	LIMIT	UNITS	
2-Chlorotoluene	ND	4.0	ug/L	
4-Chlorotoluene	ND	4.0	ug/L	
Dibromomethane	ND	4.0	ug/L	
1,2-Dichlorobenzene	ND	4.0	ug/L	
1,3-Dichlorobenzene	· ND	4.0	ug/L	
1,4-Dichlorobenzene	ND	4.0	ug/L	
Dichlorodifluoromethane	ND	8.0	ug/L	
Benzene	ND	4.0	ug/L	
Bromobenzene	ND	4.0	ug/L	
Bromochloromethane	ND	4.0	ug/L	
Bromodichloromethane	ND	4.0	ug/L	
Bromoform	ND	4.0	ug/L	
Bromomethane	ND	8.0	ug/L	
n-Butylbenzene	ND	4.0	ug/L	
sec-Butylbenzene	ND	4.0	ug/L	
tert-Butylbenzene	ND	4.0	ug/L	
Carbon tetrachloride	6.4	4.0	ug/L	
Chlorobenzene	ND	4.0	ug/L	
Chlorodibromomethane	ND	4.0	ug/L	
Chloroethane	ND	8.0	ug/L	
Chloroform	ND	4.0	ug/L	
Chloromethane	ND	8.0	ug/L	
1,1-Dichloroethane	ND	4.0	ug/L	
1,2-Dichloroethane	ND	4.0	ug/L	
1,1-Dichloroethene	ND at	4.0	ug/L	
cis-1,2-Dichloroethene	21	4.0	ug/L	
trans-1,2-Dichloroethene	ND	2.0	ug/L	
1,2-Dichloropropane	ND	4.0	ug/L	
1,3-Dichloropropane	ND	4.0	ug/L	
2,2-Dichloropropane	ND	20	ug/L	
1,1-Dichloropropene	ND	4.0	ug/L	
Ethylbenzene	ND	4.0	ug/L	
Trichlorofluoromethane	ND	8.0	ug/L	
Hexachlorobutadiene	ND	4.0	ug/L	
Isopropylbenzene	ND	4.0	ug/L	
p-Isopropyltoluene	ND	4.0	ug/L	
Methylene chloride	ND	4.0	ug/L	
Naphthalene	ND	4.0	ug/L	

Client Sample ID: HRI-03

LOC-Sample #: D1K130262-003	Work Order #: ENV1K1AC	Matrix WATER
-----------------------------	------------------------	--------------

PARAMETER	DEGIT #	REPORTING			
n-Propylbenzene Styrene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichloro-	RESULT ND ND ND ND ND ND ND ND ND ND ND ND ND	LIMIT 4.0 4.0 4.0 4.0 4.0 4.0 4.0	UNITS ug/L ug/L ug/L ug/L ug/L ug/L ug/L		
benzene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl chloride 0-Xylene m-Xylene & p-Xylene 1,2-Dibromo-3- chloropropane (DBCP) 1,2-Dibromoethane (EDB)	ND ND 120 ND ND ND ND ND ND ND ND ND ND ND ND ND	4.0 4.0 4.0 4.0 4.0 4.0 4.0 8.0 8.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L		
SURROGATE Dibromofluoromethane 1,2-Dichloroethane-d4 4-Bromofluorobenzene Toluene-d8	PERCENT RECOVERY 114 120 83 95	RECOVERY LIMITS (80 - 120) (72 - 127) (79 - 119) (79 - 119)			÷

Client Sample ID: WND-32

GC/MS Volatiles

Lot-Sample #...: D1K130262-004 Work Order #...: ENV101AC Matrix..... WATER

Date Sampled...: 11/11/01 13:20 Date Received..: 11/13/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325424 Analysis Time..: 16:06

Dilution Factor: 1

Method....: SW846 8260B

		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	
m-Xylene & p-Xylene	ND	2.0	ug/L	
1,2-Dibromo-3-	ND	2.0	ug/L	
chloropropane (DBCP)				
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	
Benzene	ND	1.0	ug/L	
Bromobenzene	ND	1.0	ug/L	
Bromochloromethane	ND	1.0	ug/L	
Bromodichloromethane	ND	1.0	ug/L	
Bromoform	ND	1.0	ug/L	
Bromomethane	ND	2.0	ug/L	
n-Butylbenzene	ND	1.0	ug/L	
sec-Butylbenzene	ND	1.0	ug/L	
tert-Butylbenzene	ND	1.0	ug/L	
Carbon tetrachloride	6.6	1.0	ug/L	
Chlorobenzene	ND	1.0	ug/L	
Chlorodibromomethane	ND	1.0	ug/L	
Chloroethane	ND	2.0	ug/L	
Chloroform	32	1.0	ug/L	
Chloromethane	ND	2.0	ug/L	
2-Chlorotoluene	ND	1.0	ug/L	
4-Chlorotoluene	ND	1.0	ug/L	
Dibromomethane	ND	1.0	ug/L	
1,2-Dichlorobenzene	ND	1.0	ug/L	
1,3-Dichlorobenzene	ND	1.0	ug/L	
1,4-Dichlorobenzene	ND	1.0	ug/L	
Dichlorodifluoromethane	ND	2.0	ug/L	
1,1-Dichloroethane	ND	1.0	ug/L	
1,2-Dichloroethane	ND	1.0	ug/L	
1,1-Dichloroethene	ND	1.0	ug/L	
cis-1,2-Dichloroethene	1.1	1.0	ug/L	
trans-1,2-Dichloroethene	ND	0.50	ug/L	
1,2-Dichloropropane	ND	1.0	ug/L	
1,3-Dichloropropane	ND	1.0	ug/L	
2,2-Dichloropropane	ND	5.0	ug/L	
1,1-Dichloropropene	ND	1.0	ug/L	
Ethylbenzene	ND	1.0	ug/L	
Trichlorofluoromethane	ND	2.0	ug/L	
Hexachlorobutadiene	ND	1.0	ug/L	
			-J/ -	

Client Sample ID: WND-32

Lot-Sample #: D1K130262-004	Work Order #: ENV101AC		Matrix WATER	3
-----------------------------	------------------------	--	--------------	---

PARAMETER	D	REPORTING	
Isopropylbenzene	RESULT	LIMIT	UNITS
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	1.0	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
-	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane		1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND .	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			2.
1,1,1-Trichloroethane	ND	1.0	uq/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	11	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
₩.	•		~5/ ~
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	e .
Dibromofluoromethane	114	(80 - 120)	
1,2-Dichloroethane-d4	119	(72 - 127)	
4-Bromofluorobenzene	87	(79 - 119)	
Toluene-d8	95	(79 - 119)	
		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

Client Sample ID: MW-10

GC/MS Volatiles

Lot-Sample #...: D1K130262-005 Work Order #...: ENV111AC Matrix..... WATER

 Date Sampled...:
 11/11/01
 16:40
 Date Received..:
 11/13/01

 Prep Date....:
 11/21/01
 Analysis Date..:
 11/21/01

 Prep Batch #...:
 1331356
 Analysis Time..:
 19:50

Dilution Factor: 40

Method.....: SW846 8260B

•		REPORTIN	3	
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	40	ug/L	
Bromobenzene	ND	40	ug/L	
Bromochloromethane	ND	40	ug/L	
Bromodichloromethane	ND	40	ug/L	
Bromoform	ND	40	ug/L	
Bromomethane	ND	. 80	ug/L	
n-Butylbenzene	ND	40	ug/L	
sec-Butylbenzene	ND	40	ug/L	
tert-Butylbenzene	ND	40	ug/L	
Carbon tetrachloride	ND	40	ug/L	
Chlorobenzene	ND	40	ug/L	
Chlorodibromomethane	ND	40	ug/L	
Chloroethane	ND	80 :	ug/L	
Chloroform	NĎ	40	ug/L	
Chloromethane	ND	80	ug/L	
2-Chlorotoluene	ND	40	ug/L	
4-Chlorotoluene	ND	40	ug/L	
Dibromomethane	ND	40	ug/L	
1,2-Dichlorobenzene	ND	40.	ug/L	
1,3-Dichlorobenzene	ND	. 40	ug/L	
1,4-Dichlorobenzene	ND	40	ug/L	
Dichlorodifluoromethane	ND	80	ug/L	
1,1-Dichloroethane	ND	40	ug/L	
1,2-Dichloroethane	ND	40	ug/L	
1,1-Dichloroethene	ND	40	ug/L	
cis-1,2-Dichloroethene	ND	40	ug/L	
trans-1,2-Dichloroethene	ND	. 20	ug/L	
1,2-Dichloropropane	ND	40	ug/L	
1,3-Dichloropropane	ND	40	ug/L	
2,2-Dichloropropane	ND	200	ug/L	
1,1-Dichloropropene	ND	40	${ t ug/L}$	
Ethylbenzene	ND	40	ug/L	
Trichlorofluoromethane	ND	80	ug/L	
Hexachlorobutadiene	ND	40	ug/L	
Isopropylbenzene	ND	40	ug/L	
p-Isopropyltoluene	ND	40	ug/L	
Methylene chloride	ND	40	ug/L	
Naphthalene	ND	40	ug/L	

Client Sample ID: MW-10

†		REPORTING	1		
PARAMETER	RESULT	LIMIT	UNITS		
n-Propylbenzene	ND	40	ug/L	<u></u>	
Styrene	ND	40	ug/L	, ,	
1,1,1,2-Tetrachloroethane	ND	40	ug/L		
1,1,2,2-Tetrachloroethane	ND	40	ug/L		
Tetrachloroethene	ND	40	ug/L		
Toluene	ND	40	ug/L	•	
1,2,3-Trichlorobenzene	ND	40	ug/L		
1,2,4-Trichloro-	ND	40	ug/L	•	
benzene			49/11	•	
1,1,1-Trichloroethane	ND	40	ug/L		
1,1,2-Trichloroethane	ND	40	ug/L		
Trichloroethene	ND	40	ug/L		
1,2,3-Trichloropropane	ND	40	ug/L	÷	
1,2,4-Trimethylbenzene	ND	40	ug/L		
1,3,5-Trimethylbenzene	ND	40	ug/L		
Vinyl chloride	ND	40 .	ug/L		
o-Xylene	ND	40	ug/L		
m-Xylene & p-Xylene	ND	80	ug/L		
1,2-Dibromo-3-	ND	80	ug/L		
chloropropane (DBCP)			57		
1,2-Dibromoethane (EDB)	ND	40	ug/L		
GUID D 0 41	PERCENT	RECOVERY	•		
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	116	(80 - 120)	•		
1,2-Dichloroethane-d4	119	(72 - 127)		•	
1-Bromofluorobenzene	94	(79 - 119)			
Foluene-d8	117	(79 - 119)	a.		

Client Sample ID: MW-11

GC/MS Volatiles

Lot-Sample #...: D1K130262-006 Work Order #...: ENV141AC Matrix..... WATER

Date Sampled...: 11/11/01 12:55 Date Received..: 11/13/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325424 Analysis Time..: 22:00

Dilution Factor: 1

Method....: SW846 8260B

		REPORTI	NG	*
PARAMETER	RESULT	LIMIT	UNITS	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	
1,2,4-Trichloro- benzene	ND	1.0	ug/L	
1,1,1-Trichloroethane	ND	1.0	ug/L	
1,1,2-Trichloroethane	ND	1.0	ug/L	
Trichloroethene	ND	1.0	ug/L	
1,2,3-Trichloropropane	ND	1.0	ug/L	
1,2,4-Trimethylbenzene	1.6	1.0	ug/L	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	
Vinyl chloride	ND	1.0	ug/L	
o-Xylene	ND	1.0	ug/L	
m-Xylene & p-Xylene	ND	2.0	ug/L	
1,2-Dibromo-3-	ND	2.0	ug/L	
chloropropane (DBCP)			49/12	
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	
tert-Butylbenzene	ND	1.0	ug/L	
Carbon tetrachloride	ND	1.0	ug/L	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	
Tetrachloroethene	ND	1.0	ug/L	
Toluene	ND	1.0	ug/L	
Chlorobenzene	ND	1.0	ug/L	
Chlorodibromomethane	ND	1.0	ug/L	
Chloroethane	ND ·	2.0	ug/L	
Chloroform	ND	1.0	ug/L	
Chloromethane	ND	2.0	ug/L	
2-Chlorotoluene	ND	1.0	ug/L	
4-Chlorotoluene	ND	1.0	ug/L	
Dibromomethane	ND	1.0	ug/L	
1,2-Dichlorobenzene	ND	1.0	ug/L	
1,3-Dichlorobenzene	ND	1.0	ug/L	
1,4-Dichlorobenzene	ND	1.0	ug/L	
Dichlorodifluoromethane	ND	2.0	ug/L	
1,1-Dichloroethane	ND .	1.0	ug/L	
1,2-Dichloroethane	ND	1.0	ug/L	
1,1-Dichloroethene	ND	1.0	ug/L	
cis-1,2-Dichloroethene	ND	1.0	ug/L	
trans-1,2-Dichloroethene	ND	0.50	ug/L	,
1,2-Dichloropropane	ND	1.0	ug/L	

Client Sample ID: MW-11

Lot-Sample #: D1K130262-006	Work Order #: ENV141AC	Matrix WAT	ree
-----------------------------	------------------------	------------	-----

•			
PARAMETER	RESULT	REPORTING	
1,3-Dichloropropane	ND	LIMIT	UNITS
2,2-Dichloropropane	ND	1.0	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
Ethylbenzene	ND ND	1.0	ug/L
Trichlorofluoromethane		1.0	ug/L
Hexachlorobutadiene	ND	2.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	1.4	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
Benzene	ND *	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
	ND	1.0	ug/L
n-Propylbenzene	2.0	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	2.5	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY		
Dibromofluoromethane	109	LIMITS	
1,2-Dichloroethane-d4	115	(80 - 120)	
4-Bromofluorobenzene	97	(72 - 127)	
Toluene-d8	90	(79 - 119) (79 - 119)	

Client Sample ID: MW-14

GC/MS Volatiles

Lot-Sample #...: D1K130262-007 Work Order #...: ENV161AC Matrix..... WATER

Date Sampled...: 11/11/01 16:15 Date Received..: 11/13/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1331356 Analysis Time..: 20:16

Dilution Factor: 40

Method.....: SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	40	ug/L
Bromobenzene	ND	40	ug/L
Bromochloromethane	ND	40	ug/L
Bromodichloromethane	ND	. 40	ug/L
Bromoform	ND	40	ug/L
Bromomethane	ND	80	ug/L
n-Butylbenzene	ND	40	ug/L
sec-Butylbenzene	ND ·	40	ug/L
tert-Butylbenzene	ND	40	ug/L
Carbon tetrachloride	ND ,	40	ug/L
Chlorobenzene	ND	40	ug/L
Chlorodibromomethane	ND	40	ug/L
Chloroethane	ND	80	ug/L
Chloroform	ND	40	ug/L
Chloromethane	ND	80	ug/L
2-Chlorotoluene	ND	40	ug/L
4-Chlorotoluene	ND	40	ug/L
Dibromomethane	ND .	40	ug/L
1,2-Dichlorobenzene	ND	40 .	ug/L
1,3-Dichlorobenzene	ND	40	ug/L
1,4-Dichlorobenzene	ND	40	ug/L
Dichlorodifluoromethane	ND	80	ug/L
1,1-Dichloroethane	ND	40 .	ug/L
1,2-Dichloroethane	ND	40	ug/L
1,1-Dichloroethene	ND	40	ug/L
cis-1,2-Dichloroethene	ND	40	ug/L
trans-1,2-Dichloroethene	ND	20	ug/L
1,2-Dichloropropane	ND	40	ug/L
1,3-Dichloropropane *	ND	40	ug/L
2,2-Dichloropropane	ND	200	ug/L
1,1-Dichloropropene	ND	40	ug/L
Ethylbenzene	ND	40	ug/L
Trichlorofluoromethane	ND	80	ug/L
Hexachlorobutadiene	ND	40	\mathtt{ug}/\mathtt{L}
Isopropylbenzene	ND	40	ug/L
p-Isopropyltoluene	ND	40	ug/L
Methylene chloride	ND	40	ug/L
Naphthalene	ND .	40	ug/L

Client Sample ID: MW-14

roc-sample #: D	1K130262-007	Work Order #:	ENV161AC	Matrix:	WATER

PARAMETER n-Propylbenzene Styrene 1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene	RESULT ND ND ND ND ND ND ND	REPORTING LIMIT 40 40 40 40 40 40 40	UNITS ug/L ug/L ug/L ug/L ug/L
1,2,3-Trichlorobenzene 1,2,4-Trichloro- benzene	ND ND	40 40	ug/L ug/L ug/L
1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl chloride o-Xylene m-Xylene & p-Xylene 1,2-Dibromo-3- chloropropane (DBCP) 1,2-Dibromoethane (EDB)	ND ND ND ND ND ND ND ND ND ND ND ND ND N	40 40 40 40 40 40 40 40 80 80	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L
SURROGATE Dibromofluoromethane 1,2-Dichloroethane-d4 4-Bromofluorobenzene Toluene-d8	PERCENT RECOVERY 114 120 96 113	RECOVERY LIMITS (80 - 120) (72 - 127) (79 - 119) (79 - 119)	•

Client Sample ID: RSCI-1

GC/MS Volatiles

Lot-Sample #...: D1K130262-008 Work Order #...: ENV181AC Matrix...... WATER

Date Sampled...: 11/11/01 08:45 Date Received..: 11/13/01
Prep Date....: 11/20/01 Analysis Date..: 11/20/01
Prep Batch #...: 1325424 Analysis Time..: 17:40

Dilution Factor: 1

Method....: SW846 8260B

	•	REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND '	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
l,2-Dichlorobenzene	ND	1.0	ug/L
l,3-Dichlorobenzene	ND	1.0	ug/L
l,4-Dichlorobenzene	ND	1.0	ug/L ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
l,1-Dichloroethane	ND	1.0	_
,2-Dichloroethane	ND	1.0	ug/L
,1-Dichloroethene	ND	1.0	ug/L
is-1,2-Dichloroethene	ND	1.0	ug/L
rans-1,2-Dichloroethene	ND ·	0.50	ug/L
,2-Dichloropropane	ND	1.0	ug/L
,3-Dichloropropane	ND	1.0	ug/L
,2-Dichloropropane	ND	5.0	ug/L
,1-Dichloropropene	ND	1.0	ug/L
thylbenzene	ND	1.0	ug/L
richlorofluoromethane	ND	2.0	ug/L
exachlorobutadiene	ND	1.0	ug/L
sopropylbenzene	ND	1.0	ug/L
-Isopropyltoluene	ND	1.0	ug/L
ethylene chloride ·	ND		ug/L
aphthalene	ND	1.0	ug/L
•	MD	1.0	ug/L

Client Sample ID: RSCI-1

Dampie #:	DIVI30595-008	Work Order #: ENV181AC	Matrix:	WATER

PARAMETER n-Propylbenzene	RESULT	REPORTING LIMIT	UNITS
Styrene	ND ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane		1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1 0	1-
1,1,2-Trichloroethane -	ND	1.0	ug/L
Trichloroethene	4.9	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0 1.0	ug/L
Vinyl chloride	ND		ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND		ug/Ļ
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)		2.0	ug/L
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
SURROGATE	PERCENT	RECOVERY	
Dibromofluoromethane	RECOVERY 112	LIMITS	
1,2-Dichloroethane-d4	119	(80 - 120)	
4-Bromofluorobenzene	84	(72 - 127)	
Toluene-d8	94	(79 - 119) (78 - 110)	
		(79 - 119)	

Client Sample ID: FB-111101

GC/MS Volatiles

Lot-Sample #...: D1K130262-009 Work Order #...: ENV2A1AA Matrix..... WATER

Date Sampled...: 11/11/01 14:55 Date Received..: 11/13/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325424 Analysis Time..: 18:04

Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER Benzene Bromobenzene Bromochloromethane	RESULT ND	LIMIT 1.0	UNITS
Bromobenzene		1 0	
		1.0	ug/L
Bromochioromethane	ND	1.0	ug/L
December 22 - 1-7	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene .	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: FB-111101

DIK130262-009	Work Order	#: ENV2A1AA	Matrix:	WATER

in the state of th			
PARAMETER	55555 - ·	REPORTING	
n-Propylbenzene	RESULT	LIMIT	UNITS
Styrene	ND	1.0	ug/L
1,1,2-Tetrachloroethane	ŃD	1.0	ug/L
Toluene	ND	1.0	ug/L
	ND	1.0	ug/L
1,2,3-Trichlorobenzene	. ND	1.0	ug/L
1,2,4-Trichloro- benzene	ND .	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0 '	· /m
Tetrachloroethene	ND	· -	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene		1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	1.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
	ND	2.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND .	1.0	ug/L
	• *	••	,
SIRROGARR	PERCENT	RECOVERY	•
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	112	(80 - 120)	
1,2-Dichloroethane-d4	117	(72 - 127)	
4-Bromofluorobenzene	83	(79 - 119)	•
Toluene-d8	94	(79 - 119)	

Client Sample ID: SK-11S

GC Volatiles

Lot-Sample #:	D1K130262-001	Work Order #:		Matrix	WATER
Date Sampled:	11/11/01 14:45	Date Received:	11/13/01	•	
Prep Date:		Analysis Date:	11/21/01		
Prep Batch #:		Analysis Time:	08:57	•	

Prep Batch #...: 1332458

Dilution Factor: 1 Method.....: RSK SOP-175

		•	REPORTING		
PARAMETER	*	RESULT	LIMIT	UNITS	
Ethane	-	ND	0.50	\mathtt{ug}/\mathtt{L}	
Ethene	3	ND .	0.50	ug/L	*
Methane		3.1	0.50	ug/L	

Client Sample ID: HRI-03

GC Volatiles

Lot-Sample #: D1K1302 Date Sampled: 11/11/0 Prep Date: 11/21/0 Prep Batch #: 1332458 Dilution Factor: 1	### Work Order #: ENV1K1AD 101 09:15 Date Received: 11/13/01 Analysis Date: 11/21/01 Analysis Time: 08:59	Matrix WATER
•	Method RSK SOD 17	

PARAMETER	RESULT	REPORTING	
Ethane	ND	LIMIT	UNITS
Ethene		0.50	ug/L
Methane	ND	0.50	ug/L
rechane	2.9	0.50	ug/L

Client Sample ID: WND-32

GC Volatiles

Lot-Sample #...: D1K130262-004 Work Order #...: ENV101AD Matrix.....: WATER

Date Sampled...: 11/11/01 13:20 Date Received..: 11/13/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332458 Analysis Time..: 09:02

Dilution Factor: 1

Method..... RSK SOP-175

REPORTING

			•	
PARAMETER	RESULT	LIMIT	UNITS	_
Ethane	ND	0.50	ug/L	
Ethene	ND	0.50	ug/L	
Methane	1.5	0.50	ug/L	
Methane	1.5	0.50	ug/L	

Client Sample ID: MW-10

GC Volatiles

Lot-Sample #: Date Sampled: Prep Date: Prep Batch #: Dilution Factor:	11/21/01 16:40 11/21/01 1332458	Work Order #: Date Received: Analysis Date: Analysis Time:	11/13/01 11/21/01	Matrix: WATER
		Method	RSK SOD-175	

PARAMETER Ethane Ethene Methane	RESULT 0.60 ND 610 R	REPORTING LIMIT 0.50 0.50 0.50	UNITS ug/L ug/L ug/L
MORRO (-)			

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

Client Sample ID: MW-10

GC Volatiles

Lot-Sample #: D1K130262-005	Work Order #: ENV112AD	Matrix WATER
Date Sampled: 11/11/01 16:40	Date Received: 11/13/01	•
Prep Date: 11/21/01	Analysis Date: 11/21/01	
Prep Batch #: 1332464	Analysis Time: 13:02	
Dilution Factor: 50	•	

Method....: RSK SOP-175

	,	REPORTING	G .	
PARAMETER	RESULT	LIMIT	UNITS	
Ethane	ND	25	ug/L	
Ethene	ND	25	ug/L	
Methane	1900 D	25	ug/L	

NOTE(S):

D Result was obtained from the analysis of a dilution.

Client Sample ID: MW-11

GC Volatiles

Lot-Sample #: Date Sampled: Prep Date: Prep Batch #: Dilution Factor:	11/11/01 12:55 11/21/01 1332458	Work Order #: Date Received: Analysis Date: Analysis Time:	11/13/01 11/21/01	Matrix: WATER
	,	Method:	RSK SOP-175	
PARAMETER Ethane Ethene		RESULT ND ND	REPORTING LIMIT UNI 0.50 ug/	

0.50

0.50

ug/L

ug/L

ND

680 E

NOTE(S):

Methane

E Estimated result. Result concentration exceeds the calibration range.

Client Sample ID: MW-11

GC Volatiles

Lot-Sample #: D1K130262-006 Date Sampled: 11/11/01 12:55 Prep Date: 11/21/01 Prep Batch #: 1332464 Dilution Factor: 100	Work Order #: Date Received: Analysis Date: Analysis Time: Method	11/13/01 11/21/01 13:08		 WATER
		REPORTING	·	
PARAMETER	RESULT	LIMIT	UNITS	
Ethane	ND	50	ug/L	
Ethene	ND .	50	ug/L	
Methane	2700 D	50	ug/L	

D Result was obtained from the analysis of a dilution.

Client Sample ID: MW-14

GC Volatiles

Date Sample #: D1 Date Sampled: 11 Prep Date: 11 Prep Batch #: 13 Dilution Factor: 1	1/11/01 16:15 p 1/21/01 p 332464 z	Work Order #: Date Received: Analysis Date: Analysis Time:	11/13/01 11/21/01	Matrix WATER
•	P	Method:	RSK SOP-175	

PARAMETER Ethane Ethene Methane	 RESULT ND ND 500 B	REPORTING LIMIT 0.50 0.50 0.50	UNITS ug/L ug/L ug/L
	*	0.50	սց/ և

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

Client Sample ID: MW-14

GC Volatiles

Lot-Sample #:	D1K130262-007	Work Order #: EN	W162AD Matrix	WATER
DOC DESIGNATION IN		"		

 Date Sampled...:
 11/11/01
 16:15
 Date Received...:
 11/13/01

 Prep Date....:
 11/21/01
 Analysis Date...:
 11/21/01

 Prep Batch #...:
 1332464
 Analysis Time...:
 10:28

Dilution Factor: 10

Method..... RSK SOP-175

REPORTING

			-
PARAMETER	RESULT	LIMIT	UNITS
Ethane	ND	5.0	ug/L
Ethene	ND	5.0	ug/L
Methane	720 D	5.0	ug/L

NOTE(S):

D Result was obtained from the analysis of a dilution.

Client Sample ID: RSCI-1

GC Volatiles

Lot-Sample #:	D1K130262-008	Work Order #	ENV181AD	Matrix	משייי אזגו
Date Sampled:	11/11/01 08:45	Date Received	11/13/01	THE CLUME TO THE COLUMN TO THE	WAILK
Prep Date:		Analysis Date:		•	
Prep Batch #:		Analysis Time:			
				•	

Dilution Factor: 1

Method....: RSK SOP-175

		REPORTING	G ·
PARAMETER	RESULT	LIMIT	UNITS
Ethane	ND	0.50	ug/L
Ethene	ND	0.50	ug/L
Methane	1.1	0.50	ug/L

Client Sample ID: SK-11S

TOTAL Metals

Lot-Sample # Date Sampled			eceived:	11/13/01		Matrix:	WATER
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	·	PREPARATION- ANALYSIS DATE	WORK ORDER #

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHO	D .	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch # Iron	0.20	0.10 Dilution Facto	mg/L r: 1		6010B Time: 12:08	11/15-11/20/01	ENV0R1AD
Manganese	0.65	0.010 Dilution Facto	mg/L r: 1		6010B Time: 19:12	11/15-11/20/01	ENVOR1AE

Client Sample ID: SK-11S

DISSOLVED Metals

Lot-Sample # Date Sampled	: D1K13026	2-001 14:45 Date Received.	: 11/13/01	Matrix:	WATER
PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #.	: 1319418	•			
Calcium	66.0	0.20 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:33	11/19/01	ENV0R1AG
Iron	ND	0.10 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:33	11/19/01	ENVORIAH
Potassium	ND	3.0 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:33	11/19/01	ENVOR1AL
Magnesium	21.6	0.20 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:33	11/19/01	ENVOR1AJ
Manganese	0.75	0.010 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:33	11/19/01	ENVOR1AK
Sodium	166	5.0 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:33	11/19/01	ENVOR1AF

Client Sample ID: HRI-03

TOTAL Metals

Lot-Sample #. Date Sampled.	: D1K130262	-003 09:15 Date R	eceived.	.: 11/13/01	Matrix:	WATER
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION - ANALYSIS DATE	WORK ORDER #
Prep Batch #.	: 1319483 0.33	0.10 Dilution Facto	mg/L or: 1	SW846 6010B Analysis Time: 12:12	11/15-11/20/01	ENVIKIAE
Manganese	0.34	0.010	mq/L	SW846 6010B	11/15-11/20/01	ENVIKLAF

Dilution Factor: 1

Client Sample ID: HRI-03

DISSOLVED Metals

Lot-Sample #...: D1K130262-003

Date Sampled...: 11/11/01 09:15 Date Received..: 11/13/01

			•		
PARAMETER	RESULT	REPORTING LIMIT UN	ITS METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	.: 1319418				
Calcium	133	0.20 mg, Dilution Factor: 1		11/19/01	ENV1K1AH
Iron	ND	0.10 mg/ Dilution Factor: 1	~	11/19/01	ENV1K1AJ
Potassium	ND	3.0 mg/ Dilution Factor: 1		11/19/01	ENV1K1AM
Magnesium	52.3	0.20 mg/ Dilution Factor: 1		11/19/01	ENVIKIAK
Manganese	0.28	0.010 mg/	L SW846 6010B Analysis Time: 15:37	11/19/01	ENVIKIAL
Sodium	50.5	5.0 mg/l	L SW846 6010B Analysis Time: 15:37	11/19/01	ENVIKLAG

Client Sample ID: WND-32

TOTAL Metals

Lot-Sample #: D1K130262-004 Date Sampled: 11/11/01 13:20 Date Received: 11/13/01					Matrix:	WATER
PARAMETER	RESULT	REPORTIN	IG UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch # Iron	: 1319483 42.4	0.10 Dilution Fac	mg/L tor: 1	SW846 6010B Analysis Time: 12:16	11/15-11/20/01	ENV101AE
Manganese	1.4	0.010	mg/L	SW846 6010B	11/15-11/20/01	ENV101AF

Analysis Time..: 19:24

Dilution Factor: 1

1.4

Manganese

Client Sample ID: WND-32

DISSOLVED Metals

Lot-Sample #...: D1K130262-004

Date Sampled...: 11/11/01 13:20 Date Received..: 11/13/01

PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #.	: 1319418				
Calcium	124	0.20 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:48	11/19/01	ENV101AH
Iron	ND	0.10 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:48	11/19/01	ENV101AJ
Potassium	5.6	3.0 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:48	11/19/01	ENV101AM
Magnesium	30.6	0.20 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:48	11/19/01	ENV101AK
Manganese	3.3	0.010 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:48	11/19/01	ENV101AL
Sodium	78.8	5.0 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:48	11/19/01	ENV101AG

Client Sample ID: MW-10

TOTAL Metals

	: D1K130262	Matrix:	: WATER			
PARAMETER	RESULT	REPORTI	NG UNITS	METHOD	PREPARATION - ANALYSIS DATE	WORK ORDER #
Prep Batch #		0.10	mcr /T.	SW846 6010B	11/15-11/20/01	, ENVIIIAR

Dilution Factor: 1

Manganese

0.010 mg/L SW846 6010B 11/15-11/20/01 ENV111AF

Analysis Time..: 12:20

Dilution Factor: 1 Analysis Time..: 19:30

Client Sample ID: MW-10

DISSOLVED Metals

Lot-Sample # Date Sampled	: D1K13026	2-005 16:40 Date Received.	.: 11/13/01	Matrix:	WATER
PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	: 1319418				
Calcium	94.8	0.20 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:52	11/19/01	ENV111AH
Iron	2.2	0.10 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:52	11/19/01	ENV111AJ
Potassium	3.3	3.0 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:52	11/19/01	ENV111AM
Magnesium	26.3	0.20 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:52	11/19/01	ENV111AK
Manganese	1.2	0.010 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:52	11/19/01	ENV111AL
Sodium	70.6	5.0 mg/L Dilution Factor: 1	SW846 6010B Analysis Time: 15:52	11/19/01	ENV111AG

Client Sample ID: MW-11

TOTAL Metals

Lot-Sample # Date Sampled	Matrix:	WATER				
·		REPORTING			PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	.: 1319483					
Iron	93.0	0.10	mg/L	SW846 6010B	11/15-11/20/01	ENV141AE
·		Dilution Facto	or: 1	Analysis Time: 12:24		
Manganese	1.4	0.010	mg/L	SW846 6010B Analysis Time: 19:36	11/15-11/20/01	ENV141AF
		Dilution Facto	or: I	Analysis ilme: 19:36		

Client Sample ID: MW-11

DISSOLVED Metals

Lot-Sample #...: D1K130262-006 Matrix....: WATER Date Sampled...: 11/11/01 12:55 Date Received..: 11/13/01 REPORTING . PREPARATION-WORK PARAMETER RESULT LIMIT UNITS METHOD ANALYSIS DATE ORDER # Prep Batch #...: 1319418 Calcium 135 0.20 mg/L SW846 6010B 11/19/01 ENV141AH Dilution Factor: 1 Analysis Time..: 15:56 Iron 1.7 0.10 mg/L SW846 6010B 11/19/01 ENV141AJ Dilution Factor: 1 Analysis Time..: 15:56 Potassium 3.2 3.0 mg/L SW846 6010B 11/19/01 ENV141AM Dilution Factor: 1 Analysis Time..: 15:56 Magnesium 17.1 0.20 mg/L SW846 6010B 11/19/01 ENV141AK Dilution Factor: 1 Analysis Time..: 15:56 Manganese 0.86 0.010 mg/L SW846 6010B 11/19/01 ENV141AL Dilution Factor: 1 Analysis Time..: 15:56 Sodium 24.3 5.0 mg/L SW846 6010B 11/19/01 **ENV141AG**

Analysis Time..: 15:56

Dilution Factor: 1

Client Sample ID: MW-14

TOTAL Metals

Lot-Sample #.	Matrix:	WATER				
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #. Iron	: 1319483 396	0.10 Dilution Fact	mg/L or: 1	SW846 6010B Analysis Time: 12:27	11/15-11/20/01	ENV161AE
Manganese	6.2	0.010 Dilution Fact	mg/L or: 1	SW846 6010B Analysis Time: 19:41	11/15-11/20/01	ENV161AF

· Client Sample ID: MW-14

DISSOLVED Metals

Lot-Sample #...: D1K130262-007 Matrix.....: WATER

Date Sampled...: 11/11/01 16:15 Date Received..: 11/13/01

		REPORTING	3		PREPARATION-	WORK	
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #	
Prep Batch #	.: 1319418						
Calcium	136	0.20	mg/L	SW846 6010B	11/19/01	ENV161AH	
		Dilution Fact	or: 1	Analysis Time: 15:5	9		
Iron	8.4	0.10	mg/L	SW846 6010B	11/19/01	ENV161AJ	
		Dilution Fact	or: 1	Analysis Time: 15:5			
Potassium	3.0	3.0	mg/L	SW846 6010B	11/19/01	ENV161AM	
	**	Dilution Facto	or: 1	Analysis Time: 15:5			
Magnesium	36.1	0.20	mg/L	SW846 6010B	11/19/01	ENV161AK	
		Dilution Facto	or: 1	Analysis Time: 15:5			
Manganese	3.1	0.010	mg/L	SW846 6010B	11/19/01	ENV161AL	
		Dilution Facto	or: 1	Analysis Time: 15:59			
Sodium	51.6	5.0	mg/L	SW846 6010B	11/19/01	ENV161AG	
		Dilution Facto		Analysis Time: 15:59		V V	

Client Sample ID: RSCI-1

TOTAL Metals

Lot-Sample #. Date Sampled.	Matrix:	WATER				
PARAMETER	RESULT	REPORTIN	G <u>UNITS</u>	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #.	: 1319483 4.2	0.10 Dilution Fac	mg/L tor: 1	SW846 6010B Analysis Time: 12:31	11/15-11/20/01	ENV181AE
Manganese	0.50	0.010 Dilution Fac	mg/L	SW846 6010B Analysis Time: 19:59	11/15-11/20/01	ENV181AF

Client Sample ID: RSCI-1

DISSOLVED Metals

Lot-Sample #...: D1K130262-008 Matrix....: WATER

Date Sampled...: 11/11/01 08:45 Date Received..: 11/13/01

							-
		REPORTING				PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHO	D	ANALYSIS DATE	ORDER #
Prep Batch #	: 1319418		. •				
Calcium	143	0.20	mg/L	SW846	6010B	11/19/01	ENV181AH
		Dilution Facto	or: 1	Analysis	Time: 16:03	•	
Iron	ND	0.10	mg/L	SW846	6010B ·	11/19/01	ENV181AJ
		Dilution Facto	r: 1	Analysis	Time: 16:03		
Potassium	ND .	3.0	mg/L	SW846	6010B	11/19/01	ENV181AM
	• •	Dilution Facto	ř: 1	Analysis	Time: 16:03		
Magnesium	57.1	0.20	mg/L	SW846	6010B	11/19/01	ENV181AK
·		Dilution Facto	r: 1	Analysis	Time: 16:03		
Manganese	0.16 '	0.010	mg/L	SW846	6010B	11/19/01	ENV181AL
		Dilution Facto	r: 1	Analysis	Time: 16:03		
Sodium	53.3	5.0	mg/L	SW846	6010B	11/19/01	ENV181AG
		Dilution Facto	r: 1	Analysis	Time: 16:03		

Client Sample ID: SK-11S

General Chemistry

Lot-Sample #...: D1K130262-001 Work Order #...: ENVOR Matrix.....: WATER

Date Sampled...: 11/11/01 14:45 Date Received..: 11/13/01

•						PREPARATION-	PREP
PARAMETER	RESULT	RL_	UNITS	METHO:	D	ANALYSIS DATE	BATCH #
Ammonia as N	ND	0.10	mg/L	MCAWW	350.1	11/14/01	1319321
		Dilution Fact	or: 1	Analysis	Time: 08:00	•	4
Bicarbonate Alkalinity	351	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
		Dilution Fact	or: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW	310.1	11/19/01	1323549
		Dilution Fact	or: 1	Analysis	Time: 14:00		
Chloride	61.2	2.5	mg/L	MCAWW	325.2	11/16/01	1324254
		Dilution Fact	or: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	1.7	0.10	mg/L	MCAWW	353.2	11/14/01	1319421
		Dilution Fact	or: 1	Analysis	Time: 08:00		
Sulfate	193 Q	25.0	mg/L	MCAWW	375.4	11/27/01	1331468
		Dilution Fact	or: 5	Analysis	Time: 13:00		
Total Alkalinity	351	5.0	mg/L	MCAWW	310.1	11/19/01	1323547
		Dilution Facto	or: 1	· Analysis	Time: 14:00		
Total Dissolved Solids	704 G	40.0	mg/L	MCAWW	160.1	11/15/01	1319624
		Dilution Facto	or: 4	Analysis	Time: 12:00		
Total Organic Carbon	5.0	1.0	mg/L	MCAWW	415.1	11/22-11/23/01	1330527
		Dilution Facto	or: 1	Analysis	Time: 02:00		•

NOTE(S):

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: HRI-03

General Chemistry

Lot-Sample #...: D1K130262-003
Date Sampled...: 11/11/01 09:15

Work Order #...: ENV1K
Date Received..: 11/13/01

Matrix..... WATER

Bicarbonate 338 5.0 mg/L MCAWW 310.1 11/19/01 13 Alkalinity Dilution Factor: 1 Analysis Time: 14:00 Carbonate Alkalinity ND 5.0 mg/L MCAWW 310.1 12/19/01 13	REP ATCH #
Alkalinity Dilution Factor: 1 Analysis Time: 14:00 Carbonate Alkalinity ND 5.0 mg/L MCAWW 310.1 11/19/01 13	319321
Carbonate Alkalinity ND 5.0 mg/L MCAWW 310.1 11/19/01 13:	323548
13.	
	323549
Chloride 73.0 2.5 mg/L MCAWW 325.2 11/16/01 132 Dilution Factor: 1 Analysis Time: 13:00	324254
Nitrate-Nitrite 2.2 0.10 mg/L MCAWW 353.2 11/14/01 133	19421
Sulfate 215 Q 25.0 mg/L MCAWW 375.4 11/27/01 133	31468
Total Alkalinity 338 5.0 mg/L MCAWW 310.1 11/19/01 132 Dilution Factor: 1 Analysis Time: 14:00	23547
Total Dissolved 798 10.0 mg/L MCAWW 160.1 11/15/01 131 Solids	19624
Dilution Factor: 1 Analysis Time: 12:00	
Total Organic Carbon 2.6 1.0 mg/L MCAWW 415.1 11/22-11/23/01 133	30527
NOTE(S):	

RL Reporting Limit

 $[\]ensuremath{\mathsf{Q}}$ - Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Client Sample ID: WND-32

General Chemistry

Lot-Sample #...: D1K130262-004

Work Order #...: ENV10

Matrix....: WATER

Date Sampled...: 11/11/01 13:20 Date Received..: 11/13/01

PARAMETER	RESULT	RL_	UNITS	METHO	D	PREPARATION - ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND	0.10 Dilution Facto	mg/L or: 1		350.1 Time: 08:00	11/14/01	1319321
Bicarbonate Alkalinity	310	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
₹. 		Dilution Facto	or: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	ND	5.0 Dilution Facto	mg/L		310.1 Time: 14:00	11/19/01	1323549
		DITUCTOR FACE	,ı. ı	marysis	11		
Chloride	68.7	2.5	mg/L		325.2	11/16/01	1324254
		Dilution Facto	or: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	6.3	0.10	mg/L		353.2	11/14/01	1319421
		Dilution Facto	or: 1	Analysis	Time: 08:00		
Sulfate	138 Q	25.0	mg/L	MCAWW	375. 4	11/27/01	1331468
		Dilution Facto	r: 5	Analysis	Time: 13:00		
Total Alkalinity	310	5.0	mg/L	MCAWW	310.1	11/19/01	1323547
10000		Dilution Facto	- '	Analysis	Time: 14:00		
Total Dissolved Solids	925 G	50.0	mg/L	MCAWW	160.1	11/16/01	1320537
5011dS		Dilution Facto	or: 5	Analysis	Time: 18:00		
mutal Cambon	2 5	1.0	mq/L	MCNWW	415.1	11/22-11/23/01	1330527
Total Organic Carbon	2.3	Dilution Facto			Time: 03:00	11,22 11,23,01	200021
	e						

NOTE(S): RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: MW-10

General Chemistry

Lot-Sample #...: D1K130262-005

Work Order #...: ENV11 Date Sampled...: 11/11/01 16:40 Date Received..: 11/13/01

Matrix..... WATER

PARAMETER	RESULI	RL_	UNITS	METHO	<u> </u>	PREPARATION - ANALYSIS DATE	PREP BATCH #
Ammonia as N	0.30	0.10	mg/L	MCAWW	350.1	11/14/01	1319321
	. *	Dilution Fac	tor: 1	Analysis	Time: 08:00	• •	
Bicarbonate Alkalinity	448	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
		Dilution Fac	tor: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW	310.1	11/19/01	1323549
	;	Dilution Fac	tor: 1	Analysis	Time: 14:00	, ,	
Chloride	39.9	2.5	mg/L	MCAWW	325.2	11/16/01	1324254
		Dilution Fac	tor: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	0.15	0.10	mg/L	MCAWW	353.2	11/14/01	1319421
•		Dilution Fac	tor: 1	Analysis	Time: 08:00		
Sulfate	ND	5.0	mg/L	MCAWW	375.4	11/27/01	1331468
		Dilution Fact	tor: 1	Analysis	Time: 13:00	,,	1331400
Total Alkalinity	448	5.0	mq/L	MCAWW	310.1	11/19/01	1323547
	-	Dilution Fact	or: 1		Time: 14:00	,,	1323347
Total Dissolved Solids	940 G	200	mg/L	MCAWW	160.1	11/16/01	1320537
		Dilution Fact	or: 20	Analysis	Time: 18:00		
Total Organic Carbon	3.5	1.0	mg/L	MCAWW	415.1	11/22-11/23/01	1330527
•		Dilution Fact	or: 1		Time: 03:00	,,,,	10002/
NOTE(S):							

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: MW-11

General Chemistry

Lot-Sample #...: D1K130262-006 Work Order #...: ENV14 Matrix....: WATER Date Sampled...: 11/11/01 12:55 Date Received..: 11/13/01

PARAMETER	RESULT	RL_	UNITS	METHO	D.	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	0.13	0.10 Dilution Fact	mg/L or: 1		350.1 Time: 08:00	11/14/01	1319321
Bicarbonate Alkalinity	257	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
•		Dilution Fact	or: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	ND	5.0	mg/L		310.1	11/19/01	1323549
		Dilution Fact	or: 1	Analysis	Time: 14:00		
Chloride	10.2	2.5	mg/L		325.2	11/16/01	1324254
		Dilution Fact	or: 1	Analysis	Time: 13:00		
Nitrate-Nitrite	0.46	0.10	mg/L		353.2	11/14/01	1319421
		Dilution Fact	or: 1	Analysis	Time: 08:00		
Sulfate	203 Q	25.0	mg/L	MCAWW	375.4	11/27/01	1331468
		Dilution Facto	or: 5	Analysis	Time: 13:00		
Total Alkalinity	257	5.0	mg/L	MCAWW	310.1	11/19/01	1323547
`		Dilution Facto	or: 1	Analysis	Time: 14:00	* •	
Total Dissolved	595 G	50.0	mg/L	MCAWW	160.1	11/15/01	1319624
		Dilution Facto	or: 5	Analysis	Time: 12:00		
Total Organic Carbon	3.6	1.0	mq/L	MCAWW	415.1	11/22-11/23/01	1330527
-		Dilution Facto	•	Analysis	Time: 03:00	. == ==, ==, ==	
	у .						

NOTE(S):
RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: MW-14

General Chemistry

Matrix....: WATER

Lot-Sample #...: D1K130262-007 Work Order #...: ENV16

Date Sampled...: 11/11/01 16:15 Date Received..: 11/13/01

	ä.						
PARAMETER	RESULT	RL	UNITS	METHO	D	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	0.37	0.10	mg/L	MCAWW	350.1	11/14/01	1319321
		Dilution Fact	or: 1	Analysis	Time: 08:00		•
Bicarbonate Alkalinity	496	5.0	mg/L	MCAWW	310.1	11/19/01	1323548
*	W	Dilution Fact	or: 1	Analysis	Time: 14:00		
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW	310.1	11/19/01	1323549
•		Dilution Fact	or: 1	Analysis	Time: 14:00		
Chloride	43.4	2.5	mg/L	MCAWW	325.2	11/16/01	1324254
	·	Dilution Fact	or: 1		Time: 13:00	,,	
Nitrate-Nitrite	0.18	0.10	mg/L	MCAWW	353.2	11/14/01	1319421
		Dilution Fact	or: 1	Analysis	Time: 08:00		
Sulfate	40.7	5.0	mg/L	MCAWW	375.4	11/27/01	1331468
	:	Dilution Facto	or: 1	Analysis	Time: 13:00		
Total Alkalinity	496	5.0	mg/L	MCAWW	310.1	11/19/01	1323547
	. •	Dilution Facto	or: 1	Analysis	Time: 14:00		
Total Dissolved Solids	540 G	200	mg/L	MCAWW	160.1	11/15/01	1319624
	-	Dilution Facto	or: 20	Analysis	Time: 12:00		
Total Organic Carbon	4.5	1.0	mg/L	MCAWW	415.1	11/22-11/23/01	1330527
		Dilution Facto	or: 1	Analysis	Time: 03:00	. == ==, =3, 02	
NOTE(S):	5		•				

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: RSCI-1

General Chemistry

Lot-Sample #...: D1K130262-008

Work Order #...: ENV18

Matrix....: WATER

Date Sampled...: 11/11/01 08:45 Date Received..: 11/13/01

PARAMETER	RESULT	RL	UNITS	METHOI	<u> </u>	PREPARATION- ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND	0.10 Dilution Factor	mg/L r: 1	MCAWW Analysis	350.1 Time: 08:00	11/14/01	1319321
Bicarbonate Alkalinity	337	5.0	mg/L	· MCAWW	310.1	11/19/01	1323548
	D	ilution Factor	r: 1	Analysis	Time: 14:00	·	
Carbonate Alkalinity		5.0	mg/L		310.1 Time: 14:00	11/19/01	1323549
Chloride	79.1	2.5		MCAWW	325.2	11/16/01	1324254
	D	ilution Facto	r: 1	Analysis	Time: 13:00		, .
Nitrate-Nitrite	3.2	0.10 Dilution Factor	mg/L r: 1		353.2 Time: 08:00	11/14/01	1319421
Sulfate	231 Q	25.0 Dilution Factor	mg/L c: 5		375.4 Time: 13:00	11/27/01	1331468
Total Alkalinity	337 .	5.0 ilution Factor	mg/L r: 1		310.1 Time: 14:00	11/19/01	1323547
Total Dissolved	858	10.0	mg/L	MCAWW	160.1	11/15/01	1319624
		ilution Factor	r: 1	Analysis	Time: 12:00		
Total Organic Carbon		1.0 Dilution Factor	mg/L r: 1		415.1 Time: 03:00	11/22-11/23/01	1330527
	*						

NOTE(S):

RL Reporting Limit Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Samp	le #	.: D1K13	0262		Matrix:	WATER

PARAMETER	PERCENT RECOVERY	RECOVERY	RPD		PREPARATION-	PREP
Ammonia as N				METHOD	ANALYSIS DATE	BATCH #
Annonia as N	105	(90 - 110)		ACATTA DE O T	S Lot-Sample#: D1K1	
	103		(0.10)		11/14/01	
	103	Dilution Fac		MCAWW 350.1	11/14/01	1319321
		Dilucion Fac	tor: 1			
Nitrate-Nitr	ite '	WO#:EN2XW1AC	-LCS/EN2	XW1AD-LCSD LCS	5 Lot-Sample#: D1K1	50000-421
	96	(90 - 110)			11/14/01	1319421
	97	(90 - 110) 0.25	(0-10)	MCAWW 353.2	11/14/01	1319421
		Dilution Fac	tor: 1		,,	
		•		•		
Total Alkalin	-	WO#:EN9N2lAC	-LCS/ENS	N21AD-LCSD LCS	Lot-Sample#: D1K1	90000-547
	99	(95 - 110)		MCAWW 310.1	11/19/01	1323547
	100	(95 - 110) 1.4	(0-10)	MCAWW 310.1	11/19/01	1323547
		Dilution Fact	or: 1			
Total Dissolv Solids	<i>r</i> ed	- WO#:EPCFL1AC	-LCS/EPC	FL1AD-LCSD LCS	Lot-Sample#: D1K1	50000-624
	91	(86 - 106)		MCAWW 160.1	11/15/01	1319624
	88	(86 - 106) 3.1	(0-20)	MCAWW 160.1	11/15/01	1319624
7		Dilution Fact			,,	1313024
		•				
Total Dissolv Solids	red	WO#:EPC5L1AC	-LCS/EPC	5L1AD-LCSD LCS	Lot-Sample#: D1K16	50000-537
	94	(86 - 106)		MCAWW 160.1	11/16/01	1320537
	93	(86 - 106) 0.85			11/16/01	1320537
		Dilution Fact		200.2	11/10/01	1320337
Total Organic	Carbon	WO#:EPG571AC-	LCS/EPG	571AD-LCSD LCS	Lot-Sample#: D1K26	0000-527
	97	(90 - 110)		MCAWW 415.1	11/22-11/23/01	
	97	(90 - 110) 0.53				1330527
		Dilution Fact	or: 1		* ***	

NOTE(S):

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: D1K130262

Matrix..... WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS METHOD	PREPARATION- PREP ANALYSIS DATE BATCH #
Chloride	97	WORK Order #: EPADKIAC (92 - 109) MCAWW 325.2 Dilution Factor: 1 Analysis Time: 13:00	LCS Lot-Sample#: D1K200000-254 11/16/01 1324254
Sulfate	94	Work Order #: EPJ5N1AC (88 - 110) MCAWW 375.4 Dilution Factor: 1 Analysis Time: 13:00	LCS Lot-Sample#: D1K270000-468 11/27/01 1331468

NOTE(S):

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #: D1K1302	262	
-----------------------	-----	--

Matrix..... WATER SPIKE MEASURED PERCNT PREPARATION-PREP ANALYSIS DATE BATCH # AMOUNT AMOUNT UNITS RECVRY RPD METHOD Ammonia as N WO#:EN2CC1AC-LCS/EN2CC1AD-LCSD LCS Lot-Sample#: D1K150000-321 105. MCAWW 350.1 11/14/01 4.00 mg/L 1319321 4.00 4.13 103 1.9 MCAWW 350.1 mg/L 11/14/01 1319321 Dilution Factor: 1 WO#:EN2XW1AC-LCS/EN2XW1AD-LCSD LCS Lot-Sample#: D1K150000-421 Nitrate-Nitrite 4.00 3.86 mg/L 96 MCAWW 353.2 11/14/01 1319421 4.00 3.87 mg/L 97 0.25 MCAWW 353.2 11/14/01 1319421 Dilution Factor: 1 Total Alkalinity WO#:EN9N21AC-LCS/EN9N21AD-LCSD LCS Lot-Sample#: D1K190000-547 185 183 mg/L 99 MCAWW 310.1 11/19/01 1323547 185 185 mg/L 100 1.4 MCAWW 310.1 11/19/01 1323547 Dilution Factor: 1 Total Dissolved WO#:EPCFL1AC-LCS/EPCFL1AD-LCSD LCS Lot-Sample#: D1K150000-624 Solids 500 454 mq/L 91 MCAWW 160.1 11/15/01 1319624 500 440 mg/L 88 3.1 MCAWW 160.1 11/15/01 1319624 Dilution Factor: 1 Total Dissolved WO#:EPC5L1AC-LCS/EPC5L1AD-LCSD LCS Lot-Sample#: D1K160000-537 Solids . 500 468 mg/L 94 MCAWW 160.1 11/16/01 1320537 500 464 0.85 MCAWW 160.1 mq/L 93 11/16/01 1320537 Dilution Factor: 1 Total Organic Carbon WO#:EPG571AC-LCS/EPG571AD-LCSD LCS Lot-Sample#: D1K260000-527 24.3 mg/L 97 MCAWW 415.1 11/22-11/23/01 1330527 25.0 25.0 24.2 97

0.53 MCAWW 415.1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

mg/L

Dilution Factor: 1

11/22/01 1330527

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #	: D1K	130262			Matr	ix:	WATER
PARAMETER	SPIKE AMOUNT	MEASURI AMOUNT	 PERCNT RECVRY	METHOD		EPARATION- ALYSIS DATE	PREP BATCH #
Chloride	50.0	48.4	97 : 1	1AC LCS Lot-Samp MCAWW 325.2	ple#:	D1K200000-2 11/16/01	54 1324254
Sulfate	25.0	23.5	94	1AC LCS Lot-Samp MCAWW 375.4	ole#:	D1K270000-4 11/27/01	68 1331468

NOTE(S):

METHOD BLANK REPORT

General Chemistry

Client Lot #:	D1K130262	Matrix:	WATER

PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION - ANALYSIS DATE	PREP BATCH #
Ammonia as N	ND	Work Order #: EN2CC1AA 0.10 mg/L Dilution Factor: 1 Analysis Time: 08:00			1319321
Chloride	ND	Work Order #: EPADK1AA 2.5 mg/L Dilution Factor: 1 Analysis Time: 13:00	MB Lot-Sample #: MCAWW 325.2	D1K200000-254 11/16/01	1324254
Nitrate-Nitrite	ND	Work Order #: EN2XW1AA 0.10 mg/L Dilution Factor: 1 Analysis Time: 08:00	MB Lot-Sample #: MCAWW 353.2	D1K150000-421 11/14/01	1319421
Sulfate	ND	Work Order #: EPJ5N1AA 5.0 mg/L Dilution Factor: 1 Analysis Time: 13:00	MB Lot-Sample #: MCAWW 375.4	D1K270000-468 11/27/01	1331468
Total Alkalinity	ND	Work Order #: EN9N21AA 5.0 mg/L Dilution Factor: 1 Analysis Time: 14:00	MB Lot-Sample #: MCAWW 310.1	D1K190000-547 11/19/01	1323547
Total Dissolved Solids	ND	Work Order #: EPCFL1AA 10.0 mg/L Dilution Factor: 1 Analysis Time: 12:00	MB Lot-Sample #:	D1K150000-624 11/15/01	. 1319624
Total Dissolved Solids	ND	Work Order #: EPC5L1AA 10.0 mg/L Dilution Factor: 1 Analysis Time: 18:00	MB Lot-Sample #: MCAWW 160.1	D1K160000-537	1320537
Total Organic Carb	non	Work Order #: EPG571AA 1.0 mg/L Dilution Factor: 1 Analysis Time: 00:00		D1K260000-527 11/22-11/23/01	1330527

NOTE(S):

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: D1K130262 Matrix....: WATER

Date Sampled...: 11/14/01 10:01 Date Received..: 11/14/01

PARAMETER Ammonia as N	PERCENT RECOVERY 101 98	(91 - 11 (91 - 11) 2.5 (0-10) MCAWW 350.1 ution Factor: 1	11/14/01 1319322
Chloride	98 96	WO: (92 - 10: (92 - 10:		MS Lot-Sample #: D1K150252-001 11/16/01 1324254 11/16/01 1324254
Nitrate-Nitr	ite 102 101	(90 - 110 (90 - 110 Dil	,	MS Lot-Sample #: D1K010254-013 11/14/01 1319421 11/14/01 1319421
Sulfate	98 99	(88 - 110 (88 - 110 Dil		MS Lot-Sample #: D1K150277-006 11/27/01 1331468 11/27/01 1331468
Total Organio	c Carbon 99 97	(90 - 110 (90 - 110 Dil	: EN16X1CM-MS/EN16X1CN-MSD) MCAWW 415.1) 1.9 (0-10) MCAWW 415.1 attion Factor: 1 ysis Time: 00:00	MS Lot-Sample #: D1K150169-002 11/22-11/23/01 1330523 11/22-11/23/01 1330523

NOTE(S):

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot Date Sample	#: 1)1K1302	262 0 <u>1</u> 10:01	Date Receive	d: 11,	/14/03		Matrix.	WATE	R
PARAMETER Ammonia as	SAMPLE AMOUNT N	SPIKE AMT	MEASURED AMOUNT WO#:	UNITS ENV381AC-MS	PERCNT	מפפ	METHOD	t-Sampl	PREPARATION- ANALYSIS DATE e #: D1K130266 11/14/01	PREP BATCH # -005 1319322
	0.69 0.69	5.00 5.00	5.74 5.60	mg/L mg/L	98	2.5	MCAWW 3		11/14/01	1319322
	0.05	5.00	_	ion Factor: 1						*.
· .			Analy	sis Time: 08:	00					
			1	, , , , , , , , , , , , , , , , , , ,	/ENOVE1	74 -MC1	n MS I.O	t-Samp]	Le #: D1K150252	-001
Chloride					98 98	M# -MD:	MCAWW 3	25.2	11/16/01	1324254
	79.0	50.0	128 127	mg/L mg/L	96	0.86	MCAWW 3		11/16/01	1324254
	79.0	50.0		ion Factor: 1	50		•			-
				ysis Time: 13:	00	:				
•								_		07.7
Nitrate-Ni	trite		WO# :	EM7JE1AL-MS		AM-MS	D MS Lo	t-Samp.	le #: D1K010254 11/14/01	1319421
	ND	5.00	5.11	mg/L	102		MCAWW 3		11/14/01	1319421
	ND	5.00	5.05	mg/L	101	1.2	MCAWW 3	153.2	11/14/01	131310-
				tion Factor: 1						
			Anal	ysis Time: 08	: 00	٠			•	
			MO#	FN29M1CO-MS	/EN29M1	.CR-MS	D MS Lo	t-Samp	le #: D1K150277	-006
Sulfate	021	250	₩О _# . 476	mg/L	98		MCAWW 3	375.4	11/2//01	1221400
	231 231	250	478	mg/L	99	0.54	MCAWW 3	375.4	11/27/01	1331468
	23 I	230	=	tion Factor: 1		v				
			Anal	ysis Time: 13	:00					
							NO T.	Comp	1~ #. DIKI50169	9-002
Total Orga	nic Car	bon	· WO#			LCN-MS	D MS LC	ot-samp	le #: D1K150169 11/22-11/23/01	1330523
	2.5	25.0	27.1	mg/L	99		MCAWW 4		11/22-11/23/01	
	2.5	25.0	26.6	mg/L	97	1.9	MCAWW 4	+T2.T	11/22-11/23/03	
•				tion Factor: 1						
			Anal	ysis Time: 00	:00					

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: D1K130262 Work Order #...: ENV3L-SMP Matrix.....: WATER ENV3L-DUP

Date Sampled...: 11/11/01 10:35 Date Received..: 11/13/01

% Moisture....: 100 Dilution Factor: Initial Wgt/Vol:

DUPLICATE RPD PREPARATION- PREP
PARAM RESULT RESULT UNITS RPD LIMIT METHOD ANALYSIS DATE BATCH #

Total Alkalinity

SD Lot-Sample #: D1K130267-006

285 284 mg/L 0.37 (0-10) MCAWW 310.1 11/19/01 1323547
Dilution Factor: 1 Analysis Time..: 14:00

68

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: D1K130262 Work Order #...: ENP78-SMP

mg/L

Matrix....: WATER

ENP78-DUP

Date Sampled...: 11/09/01 09:00 Date Received..: 11/10/01

* Moisture....: 100 Dilution Factor:

Initial Wgt/Vol:

DUPLICATE RPD PREPARATION- PREP
PARAM RESULT UNITS RPD LIMIT METHOD ANALYSIS DATE BATCH #

Total Dissolved

Solids

2550 2590

1.4

SD Lot-Sample #: D1K100172-013

(0-20) MCAWW 160.1 11/15/01

1319624

Dilution Factor: 1

Analysis Time..: 12:00

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: D1K130262 Work Order #...: ENXA0-SMP Matrix....: WATER ENXA0-DUP Date Sampled...: 11/13/01 10:47 Date Received..: 11/14/01 **% Moisture....:** 100 Dilution Factor: Initial Wgt/Vol: DUPLICATE RPD PREPARATION-PREP RPD PARAM RESULT RESULT UNITS LIMIT METHOD ANALYSIS DATE BATCH # Total Dissolved SD Lot-Sample #: D1K140151-001 Solids 3410 Q 3360 Q mg/L (0-20)1.4 MCAWW 160.1 11/16/01 1320537

Analysis Time..: 18:00

Dilution Factor: 2

NOTE(S):

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

QC DATA ASSOCIATION SUMMARY

D1K130262

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
<u></u>					
001	WATER	MCAWW 160.1		1319624	1324225
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2		1324254	1324100
	WATER	MCAWW 353.2		1319421	1319203
	WATER	MCAWW 415.1		1330527	1330240
	WATER	RSK SOP-175		1332458	1332249
	WATER	SW846 8260B		1325424	1325210
	WATER	SW846 6010B	•	1319418	1319198
	WATER	SW846 6010B		1319483	1319243
	WATER	MCAWW 375.4		1331468	1331240
	WATER	MCAWW 310.1		1323548	
	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1		1319321	1319132
002	WATER	SW846 8260B		1325424	1325210
003	WATER	MCAWW 160.1		1319624	1324225
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2		1324254	1324100
•	WATER	MCAWW 353.2		1319421	1319203
	WATER	MCAWW 415.1		1330527	1330240
	WATER	RSK SOP-175		1332458	1332249
	WATER	SW846 8260B	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1325424	1325210
	WATER	SW846 6010B		1319418	1319198
	WATER	SW846 6010B	•	1319483	1319243
!	WATER	MCAWW 375.4		1331468	1331240
	WATER	MCAWW 310.1		1323548	
	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1		1319321	1319132
004	WATER	MCAWW 160.1		1320537	1324313
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2		1324254	1324100
	WATER	MCAWW 353.2		1319421	1319203
	WATER	MCAWW 415.1		1330527	1330240
	WATER	RSK SOP-175		1332458	1332249
	WATER	SW846 8260B		1325424	1325210
	WATER	SW846 6010B		1319418	1319198
	WATER	SW846 6010B		1319483	1319243
	WATER	MCAWW 375.4		1331468	1331240
	WATER	MCAWW 310.1		1323548	
	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1		1319321	1319132

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

D1K130262

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
005	WATER	MCAUDI 160 1			
003	WATER	MCAWW 160.1 MCAWW 310.1		1320537	1324313
	WATER	MCAWW 310.1 MCAWW 325.2		1323549	
	WATER	MCAWW 353.2		1324254	1324100
	WATER	MCAWW 415.1	* * * * * * * * * * * * * * * * * * *	1319421	1319203
	WATER	RSK SOP-175		1330527	1330240
	WATER	RSK SOP-175		1332458	1332249
*	WATER	SW846 8260B		1332464	1332256
	WATER	SW846 6010B	er.	1331356	1331176
	WATER	SW846 6010B		1319418	1319198
	WATER	MCAWW 375.4		1319483	1319243
•	WATER	*		1331468	1331240
	WATER	MCAWW 310.1		1323548	
	WATER	MCAWW 310.1 MCAWW 350.1		1323547	1323314
·	WAIER	MCAWW 350.1		1319321	1319132
006	WATER	MCAWW 160.1		1319624	1324225
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2		1324254	1324100
	WATER	MCAWW 353.2		1319421	1319203
	WATER	MCAWW 415.1		1330527	1330240
	WATER	RSK SOP-175		1332458	1332249
	WATER	RSK SOP-175		1332464	1332256
	WATER	SW846 8260B		1325424	1325210
	WATER	SW846 6010B		1319418	1319198
	WATER	SW846 6010B		1319483	1319243
	WATER	MCAWW 375.4		1331468	1331240
	WATER	MCAWW 310.1		1323548	•
	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1		1319321	1319132
007	WATER	MCAWW 160.1		1319624	1324225
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2		1324254	1324100
	WATER	MCAWW 353.2		1319421	1319203
	WATER	MCAWW 415.1		1330527	1330240
	WATER	RSK SOP-175	•	1332464	1332256
	WATER	SW846 8260B		1331356	1331176
•	WATER	SW846 6010B		1319418	1319198
	WATER	SW846 6010B	,	1319483	1319243
	WATER	MCAWW 375.4		1331468	1331240
	WATER	MCAWW 310.1		1323548	
	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1		1319321	1319132
			•		

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

D1K130262

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
008	WATER	MCAWW 160.1		1319624	1324225
	WATER	MCAWW 310.1		1323549	
	WATER	MCAWW 325.2		1324254	1324100
	WATER	MCAWW 353.2		1319421	1319203
		MCAWW 415.1		1330527	1330240
	WATER	RSK SOP-175		1332464	1332256
	WATER	SW846 8260B		1325424	1325210
	WATER	SW846 6010B		1319418	1319198
	WATER	SW846 6010B		1319483	1319243
	WATER	MCAWW 375.4		1331468	1331240
	WATER	MCAWW 310.1	•	1323548	
	WATER	MCAWW 310.1		1323547	1323314
	WATER	MCAWW 350.1	•	1319321	1319132
009	WATER	SW846 8260B		1325424	1325210

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K130262 Work Order #...: EPETF1AC-LCS Matrix.....: WATER

LCS Lot-Sample#: D1K210000-424 EPETF1AD-LCSD

Prep Date....: 11/20/01 Analysis Date..: 11/20/01

Prep Batch #...: 1325424 Analysis Time..: 11:13

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	88	(79 - 119)		SW846 8260B
	93	(79 - 119)	5.7 (0-20)	SW846 8260B
Benzene	95	(79 - 119)		SW846 8260B
	95	(79 - 119)	0.20 (0-20)	SW846 8260B
Chlorobenzene	88	(76 - 116)		SW846 8260B
	88	(76 - 116)	0.88 (0-20)	SW846 8260B
Toluene	. 87	(75 - 122)		SW846 8260B
	88	(75 - 122)	0.35 (0-20)	SW846 8260B
Trichloroethene	95	(81 - 121)		SW846 8260B
	95	(81 - 121)	0.010 (0-20)	SW846 8260B
		*		
		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane		115	(80 - 120)	
		113	(80 - 120)	
1,2-Dichloroethane-d4		123	(72 - 127)	
		118	(72 - 127)	
4-Bromofluorobenzene	•	89	(79 - 119)	
		88	(79 - 119)	
Toluene-d8		93	(79 - 119)	•
		94	(79 - 119)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K130262 Work Order #...: EPETF1AC-LCS . Matrix..... WATER

LCS Lot-Sample#: D1K210000-424 EPETF1AD-LCSD

Dilution Factor: 1

	SPIKE	MEASURED		PERCENT			
PARAMETER	TUUOMA	AMOUNT	UNITS	RECOVERY	RPD	METHO	D
1,1-Dichloroethene	10.0	8.83	ug/L	88		SW846	8260B
•	10.0	9.34	ug/L	93	5.7	SW846	8260B
Benzene	10.0	9.46	ug/L	95		SW846	8260B
	10.0	9.47	ug/L	95	0.20	SW846	8260B
Chlorobenzene	10.0	8.83	ug/L	88		SW846	8260B
	10.0	8.76	ug/L	88	0.88	SW846	8260B
Toluene	10.0	8.74	ug/L	87		SW846	8260B
	10.0	8.77	ug/L	88	0.35	SW846	8260B
Trichloroethene	10.0	9.47	ug/L	95		SW846	8260B
•	10.0	9.47	ug/L	95	0.010	SW846	8260B
				•			
			PERCENT	RECOVERY			
SURROGATE			RECOVERY	LIMITS			
Dibromofluoromethane			115	(80 - 120)		
			113	(80 - 120)		
1,2-Dichloroethane-d4			123	(72 - 127)		
·			118	(72 - 127)		
4-Bromofluorobenzene			8.9	(79 - 119)		
			88	(79 - 119)		
Toluene-d8			93	(79 - 119)		
			94	(79 - 119) .		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K130262 Work Order #...: EPJQW1AC-LCS Matrix..... WATE

LCS Lot-Sample#: D1K270000-356 EPJQW1AD-LCSD

 Prep Date....: 11/21/01
 Analysis Date..: 11/21/01

 Prep Batch #...: 1331356
 Analysis Time..: 12:36

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	90	(79 - 119)		SW846 8260B
	88	(79 - 119)	2.4 (0-20)	SW846 8260B
Benzene	94	(79 - 119)		SW846 8260B
	94	(79 - 119)	0.44 (0-20)	SW846 8260B
Chlorobenzene	91	(76 - 116)	•	SW846 8260B
4 · 4	95	(76 - 116)	4.5 (0-20)	SW846 8260B
Toluene	102	(75 - 122)		SW846 8260B
	106	(75 - 122)	3.9 (0-20)	SW846 8260B
Trichloroethene	84	(81 - 121)		SW846 8260B
	87	(81 - 121)	2.8 (0-20)	SW846 8260B
		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane		111	(80 - 120)	
		107	(80 - 120)	
1,2-Dichloroethane-d4		117	(72 - 127)	
		114	(72 - 127)	
4-Bromofluorobenzene		93	(79 - 119)	
		94	(79 - 119)	
Toluene-d8		112	(79 - 119)	
		114	(79 - 119)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K130262 Work Order #...: EPJQW1AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K270000-356 EPJQW1AD-LCSD

Prep Date....: 11/21/01 Analysis Date..: 11/21/01

Prep Batch #...: 1331356 Analysis Time..: 12:36

Dilution Factor: 1

	SPIKE	MEASURED)	PERCENT		
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	10.0	9.01	ug/L	90		SW846 8260B
·	10.0	8.80	ug/L	88	2.4	SW846 8260B
Benzene	10.0	9.41	ug/L	94		SW846 8260B
	10.0	9.45	ug/L	94	0.44	SW846 8260B
Chlorobenzene	10.0	9.11	ug/L	91		SW846 8260B
	10.0	9.52	ug/L	95	4.5	SW846 8260B
Toluene	10.0	10.2	ug/L	102		SW846 8260B
	10.0	10.6	ug/L	106	3.9	SW846 8260B
Trichloroethene	10.0	8.45	ug/L	84		SW846 8260B
	10.0	8.69	ug/L	87	2.8	SW846 8260B
,			PERCENT	RECOVERY		
SURROGATE			RECOVERY	LIMITS		
Dibromofluoromethane			111	(80 - 120)	
			107	(80 - 120)	
1,2-Dichloroethane-d4			117	(72 - 127)	
			114	(72 - 127)	
4-Bromofluorobenzene			93	(79 - 119)	
			94	(79 - 119)	
Toluene-d8	*		112	(79 - 119)	
	1		114	(79 - 119)	

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K130262 Work Order #...: EPETF1AA

Matrix....: WATER

MB Lot-Sample #: D1K210000-424

Prep Date....: 11/20/01
Prep Batch #...: 1325424

Analysis Time..: 12:00

Analysis Date..: 11/20/01

Dilution Factor: 1

REPORTING

		REPORTING			
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
Benzene	ND	1.0	ug/L	SW846 8260B	
Bromobenzene	ND	1.0	ug/L	SW846 8260B	
Bromochloromethane	ND	1.0	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	2.0	ug/L	SW846 8260B	
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B	
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B	
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	2.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	2.0	ug/L	SW846 8260B	
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B	
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B	
Dibromomethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B	
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B	
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND .	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	` 1.0	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
'2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B	
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B	
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B	
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B	
p-Isopropyltoluene	ND	1.0	\mathtt{ug}/\mathtt{L}	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B .	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	

(Continued on next page)

GC/MS Volatiles

		REPORTI	NG			
PARAMETER	RESULT	LIMIT	UNITS	METHOD		
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B		
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B		
Toluene	ND	1.0	ug/L	SW846 8260B		
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B		
1,2,4-Trichloro-	ND	1.0	ug/L	SW846 8260B		
benzene						
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B		
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B		
Trichloroethene	ND	1.0	ug/L	SW846 8260B		
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B		
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B		
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B		
Vinyl chloride	ND	1.0	ug/L	SW846 8260B		
1,2-Dibromo-3-	ND	2.0	ug/L	SW846 8260B		
chloropropane (DBCP)			_			
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B		
o-Xylene	ND	1.0	ug/L	SW846 8260B		
n-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B		
	PERCENT	RECOVERY	?			
SURROGATE	RECOVERY	LIMITS				
ibromofluoromethane	115	(80 - 12	20)			
,2-Dichloroethane-d4	122	(72 - 12	· · · · · · · · · · · · · · · · · · ·			
-Bromofluorobenzene	88	(79 - 11	.9)			
Coluene-d8	93	(79 - 11	.9) .			

NOTE(S):

GC/MS Volatiles

Work Order #...: EPJQW1AA

Client Lot #...: D1K130262

MB Lot-Sample #: D1K270000-356

Prep Date....: 11/21/01
Prep Batch #...: 1331356

Matrix....: WATER
Analysis Time.:: 13:28

Analysis Date..: 11/21/01

Dilution Factor: 1

PEDODUTNO

		REPORTI:	NG			
PARAMETER	RESULT	LIMIT	UNITS	METHOD		
Benzene	ND	1.0	ug/L	SW846 8260B		
Bromobenzene	ND	1.0	ug/L	SW846 8260B		
Bromochloromethane	ND	1.0	ug/L	SW846 8260B		
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B		
Bromoform	ND	1.0	ug/L	·SW846 8260B		
Bromomethane	ND	2.0	ug/L	SW846 8260B		
n-Butylbenzene	ND .	1.0	ug/L	SW846 8260B		
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B		
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B		
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B		
Chlorobenzene	ND	1.0	ug/L	SW846 8260B		
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B		
Chloroethane	ND	2.0	ug/L	SW846 8260B		
Chloroform	ND	1.0	ug/L	SW846 8260B		
Chloromethane	ND	2.0	ug/L	SW846 8260B		
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B		
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B		
Dibromomethane	ND	1.0	ug/L	SW846 8260B		
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B		
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B		
1,4-Dichlorobenzene	· ND	1.0	ug/L	SW846 8260B		
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B		
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B		
1,2-Dichloroethane	ND	1.0	ug/L ·	SW846 8260B		
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B		
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B		
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B		
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B		
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B		
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B		
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B		
Ethylbenzene	ND	1.0	\mathtt{ug}/\mathtt{L}	SW846 8260B		
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B		
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B		
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B		
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B		
Methylene chloride	ND	1.0	ug/L	SW846 8260B		
Naphthalene	ND	1.0	ug/L	SW846 8260B		
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B		
Styrene	ND	1.0	ug/L	SW846 8260B		
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B		

(Continued on next page)

GC/MS Volatiles

		REPORTI	NG		
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trichloro- benzene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
o-Xylene	ND	1.0	ug/L	SW846 8260B	
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B	
1,2-Dibromo-3- chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B	
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B	
•	PERCENT	RECOVERS	7		
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	116	(80 - 12	20)		
1,2-Dichloroethane-d4	126	(72 - 12	27)	•	
-Bromofluorobenzene	94	(79 - 11	.9)		
Toluene-d8	110	(79 - 11	.9)	•	

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K130262 Work Order #...: ENR3V1AN-MS Matrix....: WATER

MS Lot-Sample #: D1K120225-001 ENR3V1AP-MSD

Date Sampled...: 11/09/01 15:30 Date Received..: 11/12/01
Prep Date....: 11/20/01 Analysis Date..: 11/20/01
Prep Batch #...: 1325424 Analysis Time..: 13:45

Dilution Factor: 1

		2.6			
	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	92	(79 - 119)			SW846 8260B
	88	(79 - 119)	4.5	(0-20)	SW846 8260B
Benzene	95	(79 - 119)			SW846 8260B
	92	(79 - 119)	3.5	(0-20)	SW846 8260B
Chlorobenzene	86	(76 - 116)			SW846 8260B
	84	(76 - 116)	2.5	(0-20)	SW846 8260B
Toluene	86	(75 - 122)			SW846 8260B
	85	(75 - 122)	1.2	(0-20)	SW846 8260B
Trichloroethene	93	(81 - 121)			SW846 8260B
	92	(81 - 121)	1.3	(0-20)	SW846 8260B
	•	PERCENT		RECOVERY	
SURROGATE		RECOVERY		LIMITS	
Dibromofluoromethane		112		(80 - 120)
		111		(80 - 120	•
1,2-Dichloroethane-d4		119		(72 - 127	-
		117		(72 - 127	•
4-Bromofluorobenzene		91		(79 - 119	•
		87		(79 - 119	
Toluene-d8		92		(79 - 119	•
		92		(79 - 119	•
				, , , , , , , , , , , , , , , , , , , ,	*

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K130262 Work Order #...: ENR3V1AN-MS Matrix..... WATER

MS Lot-Sample #: D1K120225-001 ENR3V1AP-MSD

Date Sampled...: 11/09/01 15:30 Date Received..: 11/12/01
Prep Date....: 11/20/01 Analysis Date..: 11/20/01
Prep Batch #...: 1325424 Analysis Time..: 13:45

Dilution Factor: 1

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	AMOUNT	TMA	AMOUNT	UNITS	RECOVERY	RPD	METHO	o '
1,1-Dichloroethene	ND	10.0	9.24	ug/L	92		SW846	8260B
	ND	10.0	8.83	ug/L	88	4.5	SW846	8260B
Benzene	ND	10.0	9.48	ug/L	95		SW846	8260B
	ND	10.0	9.16	ug/L	92	3.5	SW846	8260B
Chlorobenzene	ND	10.0	8.61	ug/L	86		SW846	8260B
	ND	10.0	8.40	ug/L	84	2.5	SW846	8260B
Toluene	ND	10.0	8.62	ug/L	86		SW846	8260B
	ND	10.0	8.51	ug/L	85	1.2	SW846	8260B
Trichloroethene	ND	10.0	9.35	ug/L	93		SW846	8260B
	ND	10.0	9.23	ug/L	92	1.3	SW846	8260B
			PERCENT		RECOVERY			
SURROGATE			RECOVER	Y	LIMITS			
Dibromofluoromethane			112	_ ,	(80 - 120))		

*	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	112	(80 - 120)		
	111	(80 - 120)		
1,2-Dichloroethane-d4	119	(72 - 127)		
	117	(72 - 127)		
4-Bromofluorobenzene	91	(79 - 119)		
	87	(79 - 119)		
Toluene-d8	92	(79 - 119)		
	92	(79 - 119)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Lot-Sample #...: D1K130262 Work Order #...: EN3CR1DJ Matrix...... WATER

MS Lot-Sample #: D1K150284-001

Date Sampled...: 11/14/01 08:50 Date Received..: 11/15/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01

Prep Batch #...: 1331356

Dilution Factor: 1

	PERCENT	RECOVERY	•
PARAMETER	RECOVERY	LIMITS	METHOD
1,1-Dichloroethene	87	(79 - 119)	SW846 8260B
Benzene	94	(79 - 119)	SW846 8260B
Chlorobenzene	91	(76 - 116)	SW846 8260B
Toluene	104	(75 - 122)	SW846 8260B
Trichloroethene	81	(81 - 121)	SW846 8260B
	*		
		PERCENT	RECOVERY
SURROGATE		RECOVERY	LIMITS
Dibromofluoromethane		112	(80 - 120)
1,2-Dichloroethane-d4		117	(72 - 127)
4-Bromofluorobenzene		98	(79 - 119)
Toluene-d8		114	(79 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Lot-Sample #...: D1K130262 Work Order #...: EN3CR1DJ Matrix.....: WATER

MS Lot-Sample #: D1K150284-001

Date Sampled...: 11/14/01 08:50 Date Received..: 11/15/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01

Prep Batch #...: 1331356

Dilution Factor: 1

	SAMPLE	SPIKE	MEASRD		PERCENT		
PARAMETER	AMOUNT	AMT.	AMOUNT	UNITS	RECOVERY	METHO	D
1,1-Dichloroethene	ND	10.0	8.71	ug/L	87	SW846	8260B
Benzene	ND	10.0	9.36	ug/L	94	SW846	8260B
Chlorobenzene	ND	10.0	9.07	ug/L	91	SW846	8260B
Toluene	ND	10.0	10.4	ug/L	104	SW846	8260B
Trichloroethene	ND	10.0	8.14	ug/L	81	SW846	8260B
			PERCENT		RECOVERY		
SURROGATE			RECOVER	<u>.Y</u>	LIMITS	<u>.</u>	•
Dibromofluoromethane			112		(80 - 120)	
1,2-Dichloroethane-d4			117	-	(72 - 127)	
4-Bromofluorobenzene			98		(79 - 119)	
Toluene-d8			114		(79 - 119	١.	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: D1K130262 Work Order #...: EPL5C1AC-LCS Matrix..... WATER

LCS Lot-Sample#: I1K280000-458 EPL5C1AD-LCSD

 Prep Date....:
 11/21/01
 Analysis Date..:
 11/21/01

 Prep Batch #...:
 1332458
 Analysis Time..:
 06:26

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS RPD	LIMITS	METHOD
Ethane	100	(70 - 130)		RSK SOP-175
	100	(70 - 130) 0.70	(0-30)	RSK SOP-175
Ethene	96	(70 - 130)	•	RSK SOP-175
	95	(70 - 130) 0.09	0 (0-30)	RSK SOP-175
Methane	99	(70 - 130)		RSK SOP-175
	101	(70 - 130) 2.4	(0-30)	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: D1K130262

Work Order #...: EPL5C1AC-LCS

LCS Lot-Sample#: I1K280000-458

EPL5ClAD-LCSD

Matrix....: WATER

Prep Date....: 11/21/01

Analysis Date..: 11/21/01

Prep Batch #...: 1332458

Analysis Time..: 06:26

Dilution Factor: 1

	SPIKE	MEASUREI	.	PERCENT			
PARAMETER	THUOMA	AMOUNT	UNITS	RECOVERY	RPD	METHOD	
Ethane	64.9	65.0	ug/L	100		RSK SOP-175	
	65.6	65.5	ug/L	100	0.70	RSK SOP-175	
Rthene	60.7	58.2	ug/L	96	٠	RSK SOP-175	
	61.3	58.3	ug/L	95	0.090	RSK SOP-175	•
Methane	34.7	34.4	ug/L	99		RSK SOP-175	
	35.0	35.3	ug/L	101	2.4	RSK SOP-175	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: D1K130262 Work Order #...: EPL5K1AC-LCS Matrix..... WATER

LCS Lot-Sample#: I1K280000-464 EPL5K1AD-LCSD

Prep Date....: 11/21/01 Analysis Date..: 11/21/01
Prep Batch #...: 1332464 Analysis Time..: 09:42

Dilution Factor: 1

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
Ethane	99	(70 - 130)			RSK SOP-175
•	103	(70 - 130)	2.7	(0-30)	RSK SOP-175
Ethene	94	(70 - 130)			RSK SOP-175
•	97	(70 - 130)	2.6	(0-30)	RSK SOP-175
Methane	97	(70 - 130)			RSK SOP-175
	100	(70 - 130)	3.1	(0-30)	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: D1K130262 Work Order #...: EPL5K1AC-LCS Matrix..... WATER

LCS Lot-Sample#: I1K280000-464 EPL5K1AD-LCSD

Prep Date....: 11/21/01 Analysis Date..: 11/21/01

Prep Batch #...: 1332464 Analysis Time..: 09:42

Dilution Factor: 1

	SPIKE	MEASURED) .	PERCENT		
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
Ethane	64.9	64.5	ug/L	99		RSK SOP-175
•	64.6	66.2	ug/L	103	2.7	RSK SOP-175
Ethene	60.7	57.2	ug/L	94	•	RSK SOP-175
	60.4	58.7	ug/L	97	2.6	RSK SOP-175
Methane	34.7	33.6	ug/L	97		RSK SOP-175
	34.5	34.6	ug/L	100	3.1	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC Volatiles

Client Lot #...: D1K130262

Work Order #...: EPL5C1AA

Matrix....: WATER

MB Lot-Sample #: I1K280000-458

Prep Date....: 11/21/01 Prep Batch #...: 1332458 Analysis Time..: 06:10

Analysis Date..: 11/21/01

Dilution Factor: 1

REPORTING

			_	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Ethane	ND	0.50	ug/L	RSK SOP-175
Ethene	ND	0.50	ug/L	RSK SOP-175
Methane	ND	0.50	ug/L	RSK SOP-175

NOTE(S):

GC Volatiles

Client Lot #...: D1K130262

Work Order #...: EPL5K1AA

Matrix....: WATER

MB Lot-Sample #: I1K280000-464

Prep Date....: 11/21/01 Prep Batch #...: 1332464

Analysis Time..: 09:39

Analysis Date..: 11/21/01

Dilution Factor: 1

REPORTING

		KEFORILI	NG .		
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	ND	0.50	ug/L	RSK SOP-175	

NOTE(S):

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: D1K130262 Work Order #...: EN15T1AF-MS Matrix...... WATER

MS Lot-Sample #: I1K150162-006 EN15T1AG-MSD

Date Sampled...: 11/12/01 12:50 Date Received..: 11/15/01 Prep Date.....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332464 Analysis Time..: 12:21

Dilution Factor: 1

•	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
Ethane	102	(68 - 104)		•	RSK SOP-175
	101	(68 - 104)	1.4	(0-14)	RSK SOP-175
Ethene	96	(69 - 102)			RSK SOP-175
	95	(69 ~ 102)	0.98	(0-15)	RSK SOP-175
Methane	99	(23 - 148)			RSK SOP-175
	92	(23 - 148)	7.5	(0-21)	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: D1K130262 Work Order #...: EN15T1AF-MS Matrix..... WATER

MS Lot-Sample #: I1K150162-006 EN15T1AG-MSD

Date Sampled...: 11/12/01 12:50 Date Received..: 11/15/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1332464 Analysis Time..: 12:21

Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Ethane	ND	63.6	64.9	ug/L	102		RSK SOP-175
	ND	63.4	64.0	ug/L	101	1.4	RSK SOP-175
Ethene	ND	59.4	57.1	ug/L	96		RSK SOP-175
	ND	59.3	56.6	ug/L	95	0.98	RSK SOP-175
Methane	0.76	34.0	34.5	ug/L	99		RSK SOP-175
	0.76	33.9	32.0	ug/L	92	7.5	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D1K130262 Matrix....: WATER

PERCENT RECOVERY PREPARATIONPARAMETER RECOVERY LIMITS METHOD ANALYSIS DATE WORK ORDER #

LCS Lot-Sample#: D1K150000-483 Prep Batch #...: 1319483

Iron 101 (92 - 114) SW846 6010B 11/15-11/20/01 EN27F1AU

Dilution Factor: 1
Analysis Time..: 11:15

Manganese 99 (89 - 114) SW846 6010B 11/15-11/20/01 EN27F1AX

Dilution Factor: 1
Analysis Time..: 17:45

NOTE(S):

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot	#: D1	X130262					Matrix:	WATER
PARAMETER	SPIKE AMOUNT	MEASURE AMOUNT	D UNITS	PERCNT RECVRY		D	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sam	ple#: D1H	(150000-4	83 Prep B	atch #	: 1319	483		
Iron	1.00	1.01	mg/L	101	SW846	6010B	11/15-11/20/01	EN27F1AU
			Dilution Fact	or: 1				
			Analysis Time	2: 11:15			ē	
Manganese	0.500	0.495	mg/L	99	SW846	6010B	11/15-11/20/01	EN27F1AX
			Dilution Fact	or: 1				
	*		Analysis Time	17:45 -				
NOTE(S):			·	·				

LABORATORY CONTROL SAMPLE EVALUATION REPORT

DISSOLVED Metals

Matrix..... WATER Client Lot #...: D1K130262 PREPARATION-RECOVERY PERCENT ANALYSIS DATE WORK ORDER # RECOVERY LIMITS METHOD PARAMETER LCS Lot-Sample#: D1K150000-418 Prep Batch #...: 1319418 11/19/01 EN2W81AH (88 - 108) SW846 6010B Calcium 101 Dilution Factor: 1 Analysis Time..: 14:21 11/19/01 EN2W81AJ 102 (92 - 114) SW846 6010B Iron Dilution Factor: 1 Analysis Time..: 14:21 11/19/01 EN2W81AK Magnesium 104 (93 - 113) SW846 6010B Dilution Factor: 1 Analysis Time..: 14:21 11/19/01 EN2W81AL 101 (89 - 114) SW846 6010B Manganese Dilution Factor: 1 Analysis Time..: 14:21 (91 - 111) SW846 6010B 11/19/01 EN2W81AM Sodium 104 Dilution Factor: 1 Analysis Time..: 14:21

(87 - 110) SW846 6010B

Dilution Factor: 1
Analysis Time..: 14:21

11/19/01

EN2W81AN

NOTE(S):

Potassium

Calculations are performed before rounding to avoid round-off errors in calculated results.

97

LABORATORY CONTROL SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot	#: D1K	130262					Matrix:	WATER
PARAMETER	SPIKE AMOUNT	MEASUF AMOUNT		PERCNT RECVRY		D	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Samp	ple#: D1K	150000-	-418 Prep Ba	tch #	: 1319	418		
Calcium	50.0	50.5	mg/L Dilution Facto Analysis Time.	101 or: 1		6010B	11/19/01	EN2W81AH
Iron	1.00	1.02	mg/L Dilution Facto Analysis Time.		SW846	6010B	11/19/01	EN2W81AJ
Magnesium	50.0	51.9	mg/L Dilution Facto Analysis Time.		SW846	6010B	11/19/01	EN2W81AK
Manganese	0.500	0.507	mg/L Dilution Facto Analysis Time.		SW846	6010B	11/19/01	EN2W81AL
Sodium	50.0	52.0	mg/L Dilution Facto Analysis Time.		SW846	6010B	11/19/01	EN2W81AM
Potassium	50.0	48.4	mg/L Dilution Facto Analysis Time.		SW846	6010B	11/19/01	EN2W81AN
NOTE(S):								

TOTAL Metals

Client Lot #...: D1K130262

NOTE (S):

Matrix....: WATER

PARAMETER	RESULT	REPORTING LIMIT	REPORTING LIMIT UNITS METHOD)	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample	#: D1K150000)-483 Prep B a	tch #:	1319483		•	
Iron	ND	0.10	mg/L	SW846	6010B	11/15-11/20/01	EN27F1AG
		Dilution Fact	or: 1				
		Analysis Time	: 11:11				
Manganese	ND	0.010	mg/L	SW846	6010B	11/15-11/20/01	EN27F1AK
J		Dilution Fact	or: 1				
		Analysis Time	: 17:39				

DISSOLVED Metals

Client Lot #...: D1K130262

Matrix....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample	#: D1K150000	-418 Prep Ba	tch #: 1	319418		
Calcium	ND	0.20 Dilution Facto	mg/L or: 1	SW846 6010B	11/19/01	EN2W81AA
	•	Analysis Time.	.: 14:17			
Iron	ND	0.10	mg/L	SW846 6010B	11/19/01	EN2W81AC
	•	Dilution Facto				
		Analysis Time.	.: 14:17	-	*.	
Magnesium	ND	0.20	mg/L	SW846 6010B	11/19/01	EN2W81AD
		Dilution Facto				
		Analysis Time.	.: 14:17			
Manganese	ND	0.010	mg/L	SW846 6010B	11/19/01	EN2W81AE
		Dilution Facto				
		Analysis Time.	.: 14:17	•		
Potassium	ND	3.0	mg/L	SW846 6010B	11/19/01	EN2W81AG
		Dilution Facto	r: 1			
		Analysis Time.	.: 14:17			
Sodium	ND	5.0	mg/L	SW846 6010B	11/19/01	EN2W81AF
		Dilution Factor	r: 1			
		Analysis Time.	.: 14:17			
				•		

MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

Matrix....: WATER Client Lot #...: D1K130262 Date Sampled...: 11/09/01 14:30 Date Received..: 11/13/01 RECOVERY PREPARATION-WORK RPD PERCENT ORDER # RECOVERY LIMITS RPD LIMITS METHOD ANALYSIS DATE MS Lot-Sample #: D1K130147-001 Prep Batch #...: 1319418 11/19/01 NC, MSB (88 - 108)SW846 6010B ENTXP1AV Calcium NC, MSB (88 - 108)(0-20)SW846 6010B 11/19/01 **ENTXPLAW** Dilution Factor: 1 Analysis Time..: 14:32 101 (92 - 114)SW846 6010B 11/19/01 **ENTXP1AX** Iron (92 - 114) 1.5 (0-20) SW846 6010B 11/19/01 ENTXP1A0 99 Dilution Factor: 1 Analysis Time..: 14:32 11/19/01 Magnesium 108 (93 - 113)SW846 6010B ENTXP1A1 (93 - 113) 1.2 (0-20) SW846 6010B 11/19/01 ENTXP1A2 105 Dilution Factor: 1 Analysis Time..: 14:32 11/19/01 ENTXP1A3 Manganese 101 (89 - 114)SW846 6010B 100 (89 - 114) 1.2 (0-20) SW846 6010B 11/19/01 ENTXPlA4 Dilution Factor: 1 Analysis Time..: 14:32 (87 - 110)11/19/01 Potassium 102 SW846 6010B ENTXP1A7 (87 - 110) 2.0 (0-20)SW846 6010B ENTXP1A8 99 11/19/01 Dilution Factor: 1 Analysis Time..: 14:32 Sodium 107 (91 - 111)SW846 6010B 11/19/01 ENTXP1A5 (91 - 111) 0.96 (0-20) 103 SW846 6010B 11/19/01 ENTXP1A6 Dilution Factor: 1 Analysis Time..: 14:32

NOTE(S):

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot # Date Sampled		.: 11/13/01	Matrix	: WATER	
PARAMETER	PERCENT RECOVERY	RECOVERY RPD LIMITS RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sampl	e #: D1K13	0277-001 Prep Batch #	.: 1319483		
Iron	96	(92 - 114)	SW846 6010B	11/15-11/20/01	ENV6X1CG
	97	(92 - 114) 0.40 (0-20)	SW846 6010B	11/15-11/20/01	ENV6X1CH
		Dilution Factor: 1			
		Analysis Time: 11:34			
•			•		
Manganese	99	(89 - 114)	SW846 6010B	11/15-11/20/01	ENV6X1CN
	100	(89 - 114) 0.89 (0-20)	SW846 6010B	11/15-11/20/01	ENV6X1CP
		Dilution Factor: 1			
		Analysis Time: 18:20			

NOTE(S):

MATRIX SPIKE SAMPLE DATA REPORT

DISSOLVED Metals

Client Lo	t #:	D1K13	0262					Matr	ix WAT	ER
Date Samp	led:	11/09	/01 14:	30 Date Receiv	ed: 1	1/13/	01			
	SAMPLE	SPTKE	MEASUR	ED	PERCNT				PREPARATION-	WORK
PARAMETER			AMOUNT		RECVRY	RPD	METHO	<u> </u>	ANALYSIS DATE	ORDER #
				T. Direct Datas			•			
MS Lot-Sa Calcium	mpie #:	DIKI3	0147-00	1 Prep Batch	₩: 1.	31941	8			
Carcram	250	50.0	300	mg/L			SW846	6010B	11/19/01	ENTXPlAV
			Q	ualifiers: NC,	MSB	•				
	250	50.0	297	mg/L			SW846	6010B	11/19/01	ENTXP1AW
				ualifiers: NC,	MSB					
				ilution Factor: 1						
			_ A	nalysis Time: 14	:32				,	,
Iron										
11011	ND	1.00	1.02	mg/L	101	v	SW846	6010B	11/19/01	ENTXP1AX
	ND	1.00	1.01	mg/L	99	1.5		6010B	11/19/01	ENTXP1A0
			D	ilution Factor: 1		•				
			A	nalysis Time: 14	:32					
Magnesium		F0 0	100	/T	100		CWO 4 C	6010B	11/19/01	ENTXP1A1
	54.3 54.3	50.0 50.0	108 107	mg/L mg/L	108 105	1.2		6010B	11/19/01	ENTXP1A1
	34.3	50.0		ilution Factor: 1	103	1.2	DNOTO		11/13/01	
•				nalysis Time: 14	:32					•
				-					•	
Manganese									•	
	ND		0.515	mg/L	101			6010B	11/19/01	ENTXP1A3
	ND	0.500	0.509	mg/L	100	1.2	SW846	6010B	11/19/01	ENTXP1A4
				ilution Factor: 1						
*		•	A	nalysis Time: 14	: 32					
Potassium										
	4.8	50.0	55.5	mg/L	102		SW846	6010B	11/19/01	ENTXP1A7
	4.8	50.0	54.4	mg/L	99	2.0	SW846	6010B	11/19/01	ENTXP1A8
			D:	ilution Factor: 1		:				
			A	nalysis Time: 14	:32					
Codium										
Sodium	156	50.0	209	mg/L	107		SW846	6010B	11/19/01	ENTXP1A5
	156	50.0	207	mg/L	103	0.96	SW846		11/19/01	ENTXP1A6
				ilution Factor: 1		· - *			,	
				nalysis Time: 14	:32		*		•	

Calculations are performed before rounding to avoid round-off errors in calculated results.

 $NC\,$ The recovery and/or RPD were not calculated.

NOTE(S):

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D1K130262 Matrix....: WATER

Date Sampled...: 11/12/01 11:00 Date Received..: 11/13/01

SAMPLE SPIKE MEASURED PERCNT PREPARATION- WORK

PARAMETER AMOUNT AMT AMOUNT UNITS RECVRY RPD METHOD ANALYSIS DATE ORDER #

MS Lot-Sample #: D1K130277-001 Prep Batch #...: 1319483

Iron

1.3 1.00 2.29 mg/L 96 SW846 6010B 11/15-11/20/01 ENV6X1CG
1.3 1.00 2.30 mg/L 97 0.40 SW846 6010B 11/15-11/20/01 ENV6X1CH

Dilution Factor: 1

Analysis Time..: 11:34

Manganese

NOTE(S):

0.047 0.500 0.541 mg/L 99 SW846 6010B 11/15-11/20/01 ENV6X1CN 0.047 0.500 0.546 mg/L 100 0.89 SW846 6010B 11/15-11/20/01 ENV6X1CP

Dilution Factor: 1

Analysis Time..: 18:20

Calculations are performed before rounding to avoid round-off errors in calculated results.

CAMERON-COLE LLC
Wichita, KS
- REPORT

Met

HOLD TIME REPORT

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GC VOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date	Analysis Date	Method Description
D1K130262001	SK-11S	11/11/01	14:45							
			SOP-175		10		14		11/21/01 08:5	i7
D1K130262003	HRI-03	11/11/01	09:15				•			
			SOP-175		10		14		11/21/01 08:5	59
D1K130262004	WND-32	11/11/01	13:20							
			SOP-175		10		14		11/21/01 09:0)2
D1K130262005	MW-10	11/11/01	16:40							
			SOP-175		10		14		11/21/01 09:0)6 ·
			SOP-175		10		14		11/21/01 13:0	12
D1K130262006	MW-11	11/11/01	12:55			,				5
			SOP-175		10		14		11/21/01 09:1	4
			SOP-175		10		14		11/21/01 13:0	8
01K130262007	MW-14	11/11/01	16:15							
	•		SOP-175		10		14		11/21/01 10:0	9
			SOP-175		10		14		11/21/01 10:2	ម
D1K130262008	RSCI-1	11/11/01	08:45							
			SOP-175		10		14		11/21/01 10:4	4.

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: METALS

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif	Ext Hold	Ana Hold	Extraction Date	 Analysis Date		Method Description
D1K130262001	SK-11S	11/11/01 14	: 45				_	. —			
			6010B		8		180		11/19/01	15:33	ICP
			6010B		9		180		11/20/01	12:58	ISP "
			6010B		9		180		11/20/01	19:10	ICP
D1K130262003	HRI-03	11/11/01 09	:15					•			
			6010B		8		180		11/19/01	15:37	ICP
			6010B		9		180		11/20/01	12:12	ICP
			6010B		9		180		11/20/01	19:18	ICP
D1K130262004	WND-32	11/11/01 13	:20								
	•		6010B		8		180		11/19/01	15:48	ICP
			6010B		9		180		11/20/01	12:16	ICP
			6010B		9	•	180		11/20/01	19:24	ICP
D1K130262005	MW-10	11/11/01 16	:40								
			6010B		8		180		11/19/01	15:52	ICP
			6010B		9		180		11/20/01	12:20	ICP
			6010B		9		180		11/20/01	19:30	ICP
D1K130262006	MW-11	11/11/01 12	:55								
			6010B		8		180		11/19/01	15:56	ICP
			6010B		9		180		11/20/01	12:24	ICP
			6010B	-	9		180	•	11/20/31	19:3€	103
D1K130262007	MW-14	11/11/01 16	:15								
			6010B		8		180		11/19/01	15:59	IJP
			6010B		9		180		11/20/01	12:27	ICP
			6010B		9		180		11/20/01	19:41	ICP
D1K130262008	RSCI-1	11/11/01 08	: 45								
			6010B	•	8		180		11/19/01	16:03	ICP
			6010B		[′] 9		180		11/20/01	12:31	ICP
			6010B		9	•	180		11/20/01	19:59	ICP

Wichita, KS

HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

Lab ID #	Well ID	Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date	Analysis Date		Method Description
D1K130262001	SK-11S	11/11/01 14	1:45	_				,	•		
		•	310.1		. 8		14		11/19/01	14:00	Alkalinity
			310.1		8 .		14		11/19/01	14:00	Alkalinit
			310.1		8		14		11/19/01	14:00	Alkalinity
			415.1		12		28		11/23/01	02:00	
			325.2		5		28		11/16/01	13:00	
			353.2		3		28		11/14/01	08:00	Nitrate- Nitrite
			160.1		4		7		11/15/01	12:00	
		•	375.4		16		28		11/27/01	13:00	
D1K130262003	HRI-03	11/11/01 09	:15					•			
			310.1		8		14		11/19/01	14:00	Alkalinity
			310.1		8		14		11/19/01	14:00	Alkalinity
			310.1		8		14		11/19/01	14:00	Alkalinity
			415.1		12		28	•	11/23/01	02:00	
			325.2		5		28		11/16/01	13:00	
			353.2		3		28		. 11/14/01	08:00	Nitrate- Nitrite
_			160.1		4		7		11/15/01	12:00	TES
			375.4		16		28		11/27/01	13:00	
k130262004	WND-32	11/11/01 13	:20								
			310.1		8		14		11/19/01	14:00	Alwalinit,
			310.1		8		14		11/19/01	14:00	Alkalinity
			310.1.		8		14		11/19/01	14:00	Alkalinity
			415.1		12		28		11/23/01	03:00	
			325.2		5		28		11/16/01	13:00	
			353.2		3		28		11/14/01	08:00	Nitrate- Nitrit-
			160.1		5		7		11/16/01	18:00	
			375.4		16		28		11/27/01	13:00	
01K130262005	MW-10	11/11/01 16	: 40								
			310.1		8		14		11/19/01	14:00	Alkalinity
	ý.		310.1		8		14		11/19/01	14:00	Alkalinity
			310.1		8		14		11/19/01	14:00	Alkalinity
			415.1		12		28		-11/23/01	•63:00	·
			325.2		5		28		11/16/01	13:00	
	•		353.2		3		28		11/14/01		Nitrate- Nitrite
			160.1		5		7		11/16/01	16:00	
	•		375.4		16		28		11/27/01	13:00	

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

Lab ID #	Well ID	Collection Date	Method	Ext Ana Ex	kt Ana old Hold	Extraction Date	Analysis Date	Method Description
D1K130262006	MW-11	11/11/01 12	2:55					•
			310.1	8	14		11/19/01 14:00	O Alkalinity
			310.1	8	14		11/19/01 14:00) Alkalinity
			310.1	8	14		11/19/01 14:00	Alkalinity
			415.1	12	28		11/23/01 03:0	,
• .		*	325.2	. 5	28		11/16/01 13:0)
			353.2	3	28		11/14/01 08:0) Nitrate-
			160.1	4	7		11/15/01 12:00	
			375.4	16	28		11/27/01 13:0:)
D1K130262007	MW-14	11/11/01 16	:15					
			310.1	8	14		11/19/01 14:00	Alkalinity
			310.1	8	14		11/19/01 14:00) Alkalinity -
			310.1	8	14		11/19/01 14:00	Alkalinit
			415.1	12	28		11/23/01 03:00	;
			325.2	5	28	A	11/16/01 13:00)
			353.2	3	28		11/14/01 08:00	Nitrate- Nitrite
			160.1	4	7		11/15/01 12:00	
			375.4	16	28		11/27/01 13:00)
D1K130262008	RSCI-1	11/11/01 08	:45					
			310.1	8	14		11/19/01 14:00) Alkalinity
			310.1	8	14		11/19/01 14:00	Alkalinity
			310.1	8	14		11/19/01 14:00) Alkalinity
			415.1	. 12	28		11/23/01 03:00	
			325.2	5	28		11/16/01 13:00	
			353.2	3	28		11/14/01 08:00	Nitrate- Nitrite
			160.1	4	7		11/15/01 12:00	
			375.4	16	28		11/27/01 13:00)

Chain of Custody Record

STL Denver 4955 Yarrow Street Arvada, CO 80002



Services Severn Trent Laboratories, Inc.

STL-4124 (1200) DEN (0900)																												•
Safety-Kleen (Wichita) Inc.	Facility	Project	Mana KG\	ger /	w Ws	ch		((Q <i>m</i>	٧ <i>٨</i> :	<i>n</i> -	C	a / .	e.)			D	ate	11/.	n/c	 ን/			Chai	in of Custody N		
Softety-Kleen (Wichitz) Inc. Address 2549 North New York Aven City Wichita Spale Zip Wichita	ve	Project Telephi Site Co	one Ni	umbe 13	r (Area	a Code	e)/Fa	x Yu	mber	> <	158	- <u>J</u>	()	20	25.0	-		L		lumbe		4			Pac		_ of	·
City Wichita Spate Zip	Code 67219	Site Co	ntact 550	// <u>[</u>	l, ni	<u> </u>	Lab	Con	tact	1/0	برجا	_			7	-	Ar mo	alys re s	oac	Attac e is r	h lis eed	t if ed)						
Project Name and Location (State) 5-K Wichity Facility, Wich, Contract/Purchase Order/Quote No.	14.KS	Carrier	Wayb	ill Nu	mber	·					,			0 B	1/5	1000 K	2k	Suto	\ \\	. ~						On a sint		,
Contract/Purchase Order/Quote No.				Ma	atrix						rs & tives		- 1	8260B	1412/14	Irai 1	Total Metuk	<u>₩</u>	/WH3	7371						Special i Condition		
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Au	Aqueous	Soul Soul		Unpres	H2SO4	HNOS	HCI	NaOH	NaOH	#163	1	735/	Disso/ra	Total	DESCIVED MOTURS	7001	⊦ Т								
sk-115	11/11/01	1445		X			1	l		6			\neg	3	J	3	1	1	1			T	十	1	\top			
RB-171101	11/11/01	1450		*						3				₹										\neg	\top			
HRI-03				X			1	1		6].		3	1	3	1	1	1									
			<u>.</u>	1			1	1		6			2	3	1	}	1	1	(
MW-10				<u>k</u>			1	1		6			1	3	1	3	1	1	- 1									
MW-II				1			1	1		6			2	3	1	کر	1	1	1									· -· -· · · · · · · · · · · · · · · · ·
MW-14							1	1		6			2	3	1	3	1	1	1					\Box				
- 5K-880				X		+-	1	-)-	\dashv	6		\neg	2	3	1	3	1		+			\dashv	\mp	4	-	IN	<u>11-13-01</u>	
RSCI-/	11/11/01	0845		X			1	1		6]:	2	3	1	3	1		1			\exists	\top	丁		-		
FB-111101	11/11/01	1455		人						3				3											\top			
		0.																					\Box					
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	☐ Poison B [Unknown			Dispos		. 1	7 1 n	licono	eal B	y Lab	1		robi	vo E				140-	46.0	(A fe	e ma	ıy be	asse	essed	if samples are	retained	
Turn Around Time Required				71010		Onem	! 				ents (ii Ciii	ver				IVIOII	uis	longe	er ura	an 3 m	ionti	115)		 	
24 Hours 1 Abhours 7 Days 14 Da	ys 21 Day		er				=																				·	
1 Relinquistellay M. Carenda	_	Date // //2	2/0;		Time / f	w		1 K	eceiv	ea B	en	_		Î	10	1 as		4	,						Da	11/13/n	101	ς
2. Relinquished By		Date			Time			2 R	ecei 6	ed B	By							1							Da		Tune	
3. Relinquished By		Date		_	Time			3 R	eceiv	ed B	ly							_								ile	Time	
Configents Please call Kay Tausch	er i'mm	al intel	· '	w	·;}}	' 7	9	40		וחל	 (,	/ /	R 19.5	into	B vİr	1401	0	NG.	1 1	uk pi	n Ø	4	v(100	orm		
DISTRIBUTION: WHITE - Stays with the Sample, CANARY	Y - Returned to Cli	ent with Rep	ort. Pl	NK -	Field (Copy						1	l		4-11		-1	<u> </u>	V									



STL Denver 4955 Yarrow Street Arvada, CO 80002-4517

Tel: 303 736 0100 Fax: 303 431 7171 www.stl-inc.com

ANALYTICAL REPORT

SAFETY KLEEN (WICHITA, KS)

Lot #: D1K070112

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue, Suite 100 Bouider, CO 80301

SEVERN TRENT LABORATORIES, INC.

Kae E. Yoder Project Manager

November 12, 2001

This report shall not be reproduced except in full, without the written approval of the laboratory

Invoice

STL Denver 4955 Yarrow Street Arvada, CO 80002

(303) 421-6611

(303) 431-7171

Bill To

Tel:

Fax:

Severn Trent Laboratories, Inc. P.O. Box 7777 W4305

Philadelphia, PA 19175-4305

John Arbuthnot Safety Kleen Inc 13351 Scenic Highway Baton Rouge, LA 70807

Orv

10 WATER

WATER, Volatile Organics, 8260B

Analysis Description

Number

28032288

12 NOV 01

STL Project Number

Customer Number

D1K070112

00408171

Terms

NET 30 DAYS

Customer Contact

SAMPLE RECEIVING DATE : 11/07/01

REPORT DATE: 11/12/01

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue Suite 100 Boulder, CO 80301

Unit Price

Extended Price

97.00

970.00

970.00

100% SURCHARGE-1 DAY TAT

970.00

NOTE:

Applicable samples will be stored at no extra charge for a period of 30 days following the final report. Samples will be properly disposed of after 30 days, unless notified otherwise in writing.

Please reference Invoice number when remitting.

Customer PO. Number / Contract Number / Reference

Salesperson

Sub Total

Tax Total

1,940.00

ORIGINAL Severn Trent Laboratories, Inc.

STL Project Manager

Kae Yoder

Table Of Contents

Standard Deliverables

Report Contents

Total Number of Pages

Standard Deliverables

The Cover Letter and the Report Cover page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.

44

- Table of Contents
- Case Narrative
- Executive Summary Detection Highlights
- Methods Summary
- Method/Analyst Summary
- Lot Sample Summary
- Analytical Results
- QC Data Association Summary
- Hold Time Report
- · Chain-of-Custody

CASE NARRATIVE

Client Name:

Safety-Kleen (Wichita)

Project Name:
Project Number:

Sample Delivery Group:

D1K070112

Narrative Date:

11/12/01

Sample Receipt

Ten water samples, submitted by Safety-Kleen (Wichita), Inc., were received by STL Denver on November 7, 2001, according to documented sample acceptance procedures. The samples were received intact at a temperature of 5.1°C. Analyses requested on the associated chains-of-custody are as follows: GC/MS Volatiles. No anomalies were encountered during sample receipt.

Results for additional samples listed on the chains-of-custody are reported under separate cover.

GC/MS Volatiles

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
B-71S	1.1-Dichloroethane	2.0	1.0	ug/L
	cis-1.2-Dichloroethene	23	1.0	ug/L
	Tetrachloroethene	24	1.0	ug/L
	Trichloroethene	3.0	1.0	ug/L
	Vinvl chloride	14	1.0	ug/L
B-72S	1.1-Dichloroethane	5.0	1.0	ug/L
B-73S	cis-1.2-Dichloroethene	3.8	1.0	ug/L
B-74S	1.1-Dichloroethane	12	5.0	ug/L
	cis-1.2-Dichloroethene	- 110	5.0	ug/L
	Methylene chloride	5.4	5.0	ug/L
	Tetrachloroethene	25	5.0	ug/L
	1.1.1-Trichloroethane	32	5.0	ug/L
	Trichloroethene	26 i	5.0	ug/L
B-75S	sec-Butylbenzene	4.7	4.0	. ug/L
	i Benzene !	8.4	4.0	ue/L
B-75D	Trichloroethene	1.4	1.0	ug/L

- The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Samples B-71S and B-73D were received at the laboratory with a pH value >2.0. The samples were analyzed within 7 days of sample collection. For samples analyzed within the normal 14 day holding time, experimental evidence suggests that some aromatic compounds in wastewater samples, notably benzene, toluene, and ethylbenzene are susceptible to biological degradation if samples are not preserved to a pH of 2.0.
- Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to analytes present above the linear calibration curve, sample B-74S had to be analyzed at a 1:5 dilution, and sample B-75S had to be analyzed at a 1:4 dilution. The reporting limits have been adjusted relative to the dilution required.

Standard batch MS/MSD has been provided. All spike parameters were within QC control limits with the exception of the items noted in the following table. The acceptable LCS/LCSD analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

	QC Barch/	MS	MSD	Recovery		RPD
Parameter	Specific Sample	%Rec	%Rec	Limits	RPD	Limits
Benzene .	QC Batch 1313389	76	91	79-119	3.6	0-20

These data and reporting limits are being used specifically to meet the needs of this project. All RLs are supported by STL Denver's Method Detection Limits (MDLs). Reporting limits in this report are at or above the MDL.

I certify that the data presented in this report are accurate, complete, and meets the minimum quality assurance standards in 40-CFR 136, 40-CFR 141, and/or SW846. The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. An assessment of the quality of the data, noting any exceptions, outliers, and/or problems encountered have been narrated herein.

Kae E. Yoder

Project Manager

Date

EXECUTIVE SUMMARY - Detection Highlights

D1K070112

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
B-71S 11/06/01 10:45 002				
1,1-Dichloroethane	2.0	1 0	,	
cis-1,2-Dichloroethene	23	1.0	ug/L	SW846 8260B
Tetrachloroethene		1.0	ug/L	SW846 8260B
Trichloroethene	24	1.0	ug/L	SW846 8260B
Vinyl chloride	3.0	1.0	ug/L	SW846 8260B
vinyi Chioride	14	1.0	ug/L	SW846 8260B
B-72S 11/06/01 11:08 003		٠		
1,1-Dichloroethane	5.0	1.0	ug/L	SW846 8260B
B-73S 11/06/01 11:50 005				,
cis-1,2-Dichloroethene	3.8	1.0	ug/L	SW846 8260B
B-74S 11/06/01 13:45 007			•	
1,1-Dichloroethane	12	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	110	5.0	ug/L	
Methylene chloride	5.4	5.0	ug/L	SW846 8260B
Tetrachloroethene	25	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	32	5.0	ug/L	SW846 8260B
Trichloroethene	26	5.0	ug/L ug/L	SW846 8260B
B-75S 11/06/01 14:35 009		3.0	ug/L	SW846 8260B
coc Putulbanas	,			
sec-Butylbenzene Benzene	4.7	4.0	ug/L	SW846 8260B
benzene	8.4	4.0	ug/L	SW846 8260B
B-75D 11/06/01 14:45 010		•		
Trichloroethene	1.4	1.0	ug/L	SW846 8260B

METHODS SUMMARY

D1K070112

PARAMETER

ANALYTICAL PREPARATION METHOD

Volatile Organics by GC/MS

SW846 8260B

SW846 5030B/826

References:

SW846

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

D1K070112

ANALYTICAL METHOD	ANALYST	ANALYST ID
SW846 8260B	Nathan Henry	004397

References:

SW846

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

D1K070112

<u>WO #</u>	SAMPLE#	CLIENT	SAMPLE	ID		,	·	SAMPLED DATE	SAMP TIME
ENF2N	001	B-71D			•			11/06/01	10 0=
ENF2T	002	B-71S	•					11/06/01	
								11/06/01	10:45
ENF2W	003	B-72S			4		•	11/06/01	11:08
ENF2X	004	B-72D				•	r	11/06/01	
ENF21	005	B-73S							
ENF22	006							11/06/01	11:50
		B-73D						11/06/01	12:15
ENF23	007	B-74S			•			11/06/01	13.45
ENF25	008	B-74D							
ENF26	_	B-75S				•		11/06/01	
			7					11/06/01	14:35
ENF27	010	B-75D	,		•			11/06/01	14:45

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Client Sample ID: B-71D

GC/MS Volatiles

Lot-Sample #...: D1K070112-001 Work Order #...: ENF2N1AA Matrix..... WATER

Date Sampled...: 11/06/01 10:35 Date Received..: 11/07/01 Prep Date....: 11/07/01 Analysis Date..: 11/07/01 Prep Batch ‡...: 1312554 Analysis Time..: 18:39

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND .	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	. 1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
		1.0	-
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND .		ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: B-71D

Lot-Sample #: D1K070112-001 V	Work Order	#: ENF2N1AA	Matrix:	WATER
-------------------------------	------------	-------------	---------	-------

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
n-Propylbenzene	ND	1.0	ug/L	
Styrene	. ND	1.0	ug/L	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	
Tetrachloroethene	ND	1.0	ug/L	
Toluene	ND	1.0	ug/L	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	
1,2,4-Trichloro-	ND	1.0	ug/L	
benzene				
1,1,1-Trichloroethane	ND	1.0	ug/L	
1,1,2-Trichloroethane	ND .	1.0	ug/L	,
Trichloroethene	ND	1.0	ug/L	
1,2,3-Trichloropropane	ND	1.0	ug/L	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	
Vinyl chloride	ND	1.0	ug/L	
o-Xylene	ND	1.0	ug/L	
m-Xylene & p-Xylene	ND .	2.0	ug/L	
1,2-Dibromo-3-	ND	2.0	ug/L	
chloropropane (DBCP)				
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS	· •	
Dibromofluoromethane	102	(80 - 120)		
1,2-Dichloroethane-d4	100	(72 - 127)		
4-Bromofluorobenzene	95 ·	(79 - 119)		
Toluene-d8	101	(79 - 119)		

Client Sample ID: B-71S

GC/MS Volatiles

Lot-Sample #...: D1K070112-002 Work Order #...: ENF2T1AA Matrix..... WATER

 Date Sampled...:
 11/06/01 10:45
 Date Received...:
 11/07/01

 Prep Date.....:
 11/08/01
 Analysis Date...:
 11/08/01

 Prep Batch #...:
 1313389
 Analysis Time...:
 12:49

Dilution Factor: 1

Method..... SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	. ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	2.0	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	23	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	CM	1.0	ug/L
Isopropylbenzene	ND .	1.0	ug/L
p-Isopropyltoluene	ND .	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: B-71S

Lot-Sample #: D1K070112-002	Work Order	ENF2T1AA	Matrix:	WATER
-----------------------------	------------	----------	---------	-------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND .	1.0	ug/L
Tetrachloroethene	24	1.0	ug/L
Toluene '	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro- benzene	ИD	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	3.0	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	14	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)	v.		·
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	_
Dibromofluoromethane	108	(80 - 120)	
1,2-Dichloroethane-d4	113	(72 - 127)	
4-Bromofluorobenzene	97	(79 - 119)	
Toluene-d8	98	(79 - 119)	

Client Sample ID: B-72S

GC/MS Volatiles

Lot-Sample #...: D1K070112-003 Work Order #...: ENF2W1AA Matrix.....: WATER

 Date
 Sampled...:
 11/06/01
 11:08
 Date
 Received...:
 11/07/01

 Prep
 Date...:
 11/07/01
 Analysis
 Date...:
 11/07/01

 Prep
 Batch #...:
 1312554
 Analysis
 Time...:
 19:27

Dilution Factor: 1

Method....: SW846 8260B

P		REPORTING	;
PARAMETER	RESULT	LIMIT	UNITS
Bromobenzene	ND	1.0	ug/L ·
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/⊑
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	5.0	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ИD	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/̃L

Client Sample ID: B-72S

GC/MS Volatiles

Lot-Sample #...: D1K070112-003 Work Order #...: ENF2W1AA Matrix..... WATER

PARAMETER	ресит п	REPORTING	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
n-Propylbenzene	RESULT	LIMIT	UNITS
Styrene	ND	1.0	ug/L
-	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L .
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0 .	ug/L
chloropropane (DBCP)	•		
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
·	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	<u> </u>
Dibromofluoromethane	101	(80 - 120)	
1,2-Dichloroethane-d4	102	(72 - 127)	
4-Bromofluorobenzene	92	(79 - 119)	
Toluene-d8	99	(79 - 119)	

Client Sample ID: B-72D

GC/MS Volatiles

Lot-Sample #...: D1K070112-004 Work Order #...: ENF2X1AA Matrix..... WATER

 Date Sampled...:
 11/06/01
 11:15
 Date Received...:
 11/07/01

 Prep Date.....:
 11/07/01
 Analysis Date...:
 11/07/01

 Prep Batch #...:
 1312554
 Analysis Time...:
 19:51

Dilution Factor: 1

Method..... SW846 8260B

		REPORTING	G .
PARAMETER	RESULT	LIMIT	UNITS
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L.
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug¹/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND.	5.0	ug/L
1,1-Dichloropropene	ND .	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: B-72D

Lot-Sample #: D1K070112-004	Work Order	ENF2X1AA	Matrix:	WATER
-----------------------------	------------	----------	---------	-------

		REPORTING	
PARAMETER	RESULT	<u>LIMIT</u>	<u>UNITS</u>
n-Propylbenzene	ND	1.0	ug/L ·
Styrene	ND	1.0	\mathtt{ug}/\mathtt{L}
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L †
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			•
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			-
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	_
Dibromofluoromethane	97	(80 - 120)	· ·
1,2-Dichloroethane-d4	94	(72 - 127)	
4-Bromofluorobenzene	8 σ	(79 - 119)	k
Toluene-d8	99	(79 - 119)	

Client Sample ID: B-73S

GC/MS Volatiles

Lot-Sample #...: D1K070112-005 Work Order #...: ENF211AA Matrix..... WATER

 Date Sampled...:
 11/06/01
 11:50
 Date Received...:
 11/07/01

 Prep Date....:
 11/07/01
 Analysis Date...:
 11/07/01

 Prep Batch #...:
 1312554
 Analysis Time...:
 20:15

Dilution Factor: 1

Method..... SW846 8260B

•	.	REPORTIN	G	
PARAMETER	RESULT	LIMIT	UNITS	
Bromobenzene	ND	1.0	ug/L	
Bromochloromethane	ND	1.0	ug/L	
Bromodichloromethane	ND	1.0	ug/L	
Bromoform	ND	1.0	ug/L	
Bromomethane	ND	2.0	ug/L	
n-Butvlbenzene	ND	1.0	ug/L `	
sec-Butylbenzene	ND	1.0	ug/L	· v
tert-Butylbenzene	ND	1.0	ug/L	
Carbon tetrachloride	ND	1.0	ug/L	
Benzene	ND	1.0	ug/L	
Chlorobenzene	ND .	1.0	ug/L	
Chlorodibromomethane	ND	1.0	ug/L	
Chloroethane	ND	2.0	ug/L	
Chloroform	ND .	1.0	ug/L	
Chloromethane	ND	2.0	ug/L	
2-Chlorotoluene	ND	1.0	ug/L	
4-Chlorotoluene	ND	1.0	ug/L	
Dibromomethane	ND	1.0	ug/L	
1,2-Dichlorobenzene	ND	1.0	ug/L	
1,3-Dichlorobenzene	ND	1.0	ug/L	
1,4-Dichlorobenzene	ND	1.0	ug/L	
Dichlorodifluoromethane	ND	2.0	ug/L	
1,1-Dichloroethane	ND	1.0	ug/L	
1,2-Dichloroethane	ND	1.0	ug/L	
1,1-Dichloroethene	ND	1.0	ug/L	
cis-1,2-Dichloroethene	3.8	1.0	ug/L	
trans-1,2-Dichloroethene	ND	0.50	ug/L	
1,2-Dichloropropane	ND	1.0	ug/L	
1,3-Dichloropropane	ND	1.0	ug/L	
2,2-Dichloropropane	ND	5.0	ug/L	
1,1-Dichloropropene	ND	1.0	ug/L	
Ethylbenzene	ND	1.0	ug/L	
Trichlorofluoromethane	ND	2.0	ug/L	
Hexachlorobutadiene	ND	1.0	ug/L	
Isopropylbenzene	ND	1.0	ug/ <u>L</u>	
p-Isopropyltoluene	ND	1.0	ug/L	
Methylene chloride	ND	1.0	ug/L	
Naphthalene	ND	1.0	ug/L	

Client Sample ID: B-73S

Lot-Sample #: D1K070112-005	Work Order	F: ENF211AA	Matrix:	WATER
-----------------------------	------------	-------------	---------	-------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	' ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene ·	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro- benzene	ND .	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3- chloropropane (DBCP)	ND	2.0	ug/L
1,2-Dibromoethane (EDB)	ND .	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	_
Dibromofluoromethane	100	(80 - 120)
1,2-Dichloroethane-d4	100	(72 - 127)
4-Bromofluorobenzene	92	(79 - 119)
Toluene-d8	99	(79 - 119) .

Client Sample ID: B-73D

GC/MS Volatiles

Lot-Sample #...: D1K070112-006 Work Order #...: ENF221AA Matrix..... WATER

 Date Sampled...:
 11/06/01
 12:15
 Date Received..:
 11/07/01

 Prep Date....:
 11/07/01
 Analysis Date..:
 11/07/01

 Prep Batch #...:
 1312554
 Analysis Time..:
 20:39

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND ·	1.0	ug/L
benzene			-
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND .	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)		·	
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L

Client Sample ID: B-73D

Lot-Sample #: D1K070112-006	Work Order #: ENF221AA	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTING				
PARAMETER	RESULT	LIMIT	UNITS			
Chloroethane	ND	2.0	ug/L			
Chloroform	ND	1.0	ug/L			
Chloromethane	ND	2.0	ug/L			
2-Chlorotoluene	ND	1.0	ug/L			
4-Chlorotoluene	ND	1.0	ug/L	*		
Dibromomethane	ND .	1.0	ug/L		• •	
1,2-Dichlorobenzene	ND.	1.0	ug/L			
1,3-Dichlorobenzene	ND	1.0	ug/L			
1,4-Dichlorobenzene	ND	1.0	ug/L			
Dichlorodifluoromethane	ND	2.0	ug/L			
1,1-Dichloroethane	ND	1.0	ug/L			
1,2-Dichloroethane	ND	1.0	ug/L			
1,1-Dichloroethene	ND	1.0	ug/L	-		
cis-1,2-Dichloroethene	ND	1.0	ug/L			
trans-1,2-Dichloroethene	ND	0.50	ug/L			,
1,2-Dichloropropane	ND	1.0	ug/L			
1,3-Dichloropropane	ND	1.0	ug/L		•	
2,2-Dichloropropane	ND	5.0	ug/L			
1,1-Dichloropropene	ND	1.0	ug/L			
Ethylpenzene	ND	1.0	ug/L			
Trichlorofluoromethane	ND	2.0	ug/L			
	PERCENT	RECOVERY	•			•
SURROGATE	RECOVERY	LIMITS			1	
Dibromofluoromethane	95	(80 - 120)		* *		
1,2-Dichloroethane-d4	96	(72 - 127)				
4-Bromofluorobenzene	89	(79 - 119)				
Toluene-d8	96	(79 - 119)				

Client Sample ID: B-74S

GC/MS Volatiles

Lot-Sample #...: D1K070112-007 Work Order #...: ENF231AA Matrix..... WATER

 Date
 Sampled...:
 11/06/01
 13:45
 Date Received...:
 11/07/01

 Prep
 Date.....:
 11/07/01
 Analysis Time...:
 11/07/01

 Prep
 Batch #...:
 1312554
 Analysis Time...:
 21:03

Dilution Factor: 5

Method....: SW846 8260B

		REPORTIN	īG .
PARAMETER	RESULT	LIMIT	UNITS
Bromobenzene	ND	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	10	ug/L
n-Butylbenzene	ND	5.0 °	ug/L
sec-Butylbenzene	ND	5.0	ug/≟
tert-Butylbenzene	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
Benzene	ND -	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Chlorodibromomethane	ND	5.0	ug/L
Chloroethane	ND	10	ug/L
Chloroform	ND	5.0	ug/L
Chloromethane	ND	10	ug/L
2-Chlorotoluene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
Dichlorodifluoromethane	ND	10	ug/L
1,1-Dichloroethane	12	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
cis-1,2-Dichloroethene	110	5.0	ug/L
trans-1,2-Dichloroethene	ND	2.5	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
1,3-Dichloropropane	ND	5.0	\mathtt{ug}/\mathtt{L}
2,2-Dichloropropane	ND	25	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Trichlorofluoromethane	ND	10	ug/L
Hexachlorobutadiene	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
p-Isopropyltoluene	ND .	5.0	ug/L
Methylene chloride	5.4	5.0	ug/L
Naphthalene	ND	5.0	ug/L

Client Sample ID: B-74S

Lot-Sample #: D1K070112-007 Work Order #: ENF231AA Matrix WA	YTER
--	------

		REPORTING			
PARAMETER	RESULT	LIMIT	UNITS		
n-Propylbenzene	ND	5.0	ug/L	•	
Styrene	ND	5.0	ug/L		
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L		
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L		
Tetrachloroethene	25	5.0	ug/L		
Toluene	ND	5.0	ug/L		
1,2,3-Trichlorobenzene	ND .	5.0	ug/L		
1,2,4-Trichloro-	ND	5.0	ug/L		
benzene					
1,1,1-Trichloroethane	32	5.0	ug/L		
1,1,2-Trichloroethane	ND	5.0	ug/L		
Trichloroethene	26	5.0	ug/L		
1,2,3-Trichloropropane	ND	5.0	ug/L		
1,2,4-Trimethylbenzene	ND	5.0	ug/L		
1,3,5-Trimethylbenzene	ND	5.0	ug/L		
Vinyl chloride	ИD	5.0	ug/L		
o-Xylene	ND	5.0	ug/L	•	
m-Xylene & p-Xylene	ND	10	ug/L		
1,2-Dibromo-3-	ND	10	ug/L		
chloropropane (DBCP)			_		
1,2-Dibromoethane (EDB)	ND .	5.0	ug/L		
•	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	104	(80 - 120)	-		
1,2-Dichloroethane-d4	105	(72 - 127)			
4-Bromofluorobenzene	95	(79 - 119)			
Toluene-d8	100	(79 - 119)			

Client Sample ID: B-74D

GC/MS Volatiles

Lot-Sample #...: D1K070112-008 Work Order #...: ENF251AA Matrix..... WATER

 Date
 Sampled...:
 11/06/01
 14:00
 Date Received...:
 11/07/01

 Prep
 Date....:
 11/07/01
 Analysis
 Date...:
 11/07/01

 Prep
 Batch #...:
 1312554
 Analysis
 Time...:
 21:27

Dilution Factor: 1

Method..... SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L .
Benzene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND .	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND .	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND .	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: B-74D

Hot-sample #: DIRU/0112-008 Work Order #: ENF251AA Matrix WATER

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND .	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene	•		J ,
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			· 5. —
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
•			J
	PERCENT	RECOVERY	•
SURROGATE	RECOVERY	LIMITS	4
Dibromofluoromethane	100	(80 - 120	<u>)</u>
1,2-Dichloroethane-d4	101	. (72 - 127	•
4-Bromofluorobenzene	92	(79 - 119	
Toluene-d8	94	(79 - 119	•

Client Sample ID: B-75S

GC/MS Volatiles

Lot-Sample #...: D1K070112-009 Work Order #...: ENF261AA Matrix..... WATER

 Date Sampled...:
 11/06/01 14:35
 Date Received...:
 11/07/01

 Prep Date.....:
 11/07/01
 Analysis Date...:
 11/07/01

 Prep Batch #...:
 1312554
 Analysis Time...:
 21:52

Dilution Factor: 4

Method..... SW846 8260B

•		REPORTIN	G.
PARAMETER	RESULT	LIMIT	UNITS
Bromobenzene	ND	4.0	ug/L
Bromochloromethane	ND	4.0	ug/L
Bromodichloromethane	ND	4.0	uq/L
Bromoform	ND	4.0	ug/L
Bromomethane	ND	8.0	ug/L
n-Butylbenzene	ND	4.0	ug/L
sec-Butylbenzene	4.7	4.0	ug/L
tert-Butylbenzene	ND	4.0	ug/L
Carbon tetrachloride	ND	4.0	ug/L
Benzene	8.4	4.0	ug/L
Chlorobenzene	ND	4.0	ug/L
Chlorodibromomethane	ND	4.0	ug/L
Chloroethane	ND	8.0	ug/L
Chloroform	ND	4.0	ug/L
Chloromethane	ND	8.0	ug/L
2-Chlorotoluene	ND	4.0	ug/L
4-Chlorotoluene	ND	4.0	ug/L ·
Dibromomethane	ND	4.0	ug/L
1,2-Dichlorobenzene	ND	4.0	ug/L
1,3-Dichlorobenzene	ND	4.0	ug/ī
1,4-Dichlorobenzene	ND .	4.0	ug/L
Dichlorodifluoromethane	ND	8.0	ug/L
1,1-Dichloroethane	ND	4.0	ug/L
1,2-Dichloroethane	ND	4.0	ug/L
1,1-Dichloroethene	ND	4.0	ug/L
cis-1,2-Dichloroethene	ND	4.0	ug/L
trans-1,2-Dichloroethene	ND .	2.0	ug/L
1,2-Dichloropropane	ND	4.0	ug/ <u>L</u>
1,3-Dichloropropane	ND	4.0	ug/L
2,2-Dichloropropane	ND	20	ug/L
1,1-Dichloropropene	ND	4.0	ug/L
Ethylbenzene	ND	4.0	ug/L
Trichlorofluoromethane	ND	8.0	ug/L
Hexachlorobutadiene	ND	4.0	ug/L
Isopropylbenzene	ND	4.0	ug/L
p-Isopropyltoluene	ND	4.0	ug/L
Methylene chloride	ND	4.0	ug/L
Naphthalene	ND	4.0	ug/L
			-

Client Sample ID: B-75S

Lot-Sample #: D1K070112-009	Work Order #: ENF2	Matrix: WATER
-----------------------------	--------------------	---------------

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
n-Propylbenzene	ND	4.0	ug/L	
Styrene	ND	4.0	ug/L	
1,1,1,2-Tetrachloroethane	ND ·	4.0	ug/L	٠
1,1,2,2-Tetrachloroethane	ND	4.0	ug/L	
Tetrachloroethene	ND	4.0	ug/L	
Toluene	ND	4.0	ug/L	
1,2,3-Trichlorobenzene	ND	4.0	ug/L	
1,2,4-Trichloro- benzene	ND	4.0	ug/L	
1,1,1-Trichloroethane	ND	4.0	ug/L	
1,1,2-Trichloroethane	ND	4.0	ug/L	
Trichloroethene	ND	4.0	ug/L	
1,2,3-Trichloropropane	ND	4.0	ug/L	
1,2,4-Trimethylbenzene	ND	4.0	ug/L	
1,3,5-Trimethylbenzene	ND	4.0	ug/L	
Vinyl chloride	ND	4.0	ug/L	
o-Xylene	ND	4.0	ug/L	
m-Xylene & p-Xylene	ND	8.0	ug/L	
1,2-Dibromo-3- chloropropane (DBCP)	ND	8.0	ug/L	
1,2-Dibromoethane (EDB)	ND	4.0	ug/L	
	PERCENT	RECOVERY	v .	
SURROGATE	RECOVERY	LIMITS		
Dibromoflucromethane	104	(80 - 120)		
1,2-Dichloroethane-d4	104	(72 - 127)		
4-Bromofluorobenzene	101	(79 - 119)	•	
Toluene-d8	99	(79 - 119)		

Client Sample ID: B-75D

GC/MS Volatiles

Lot-Sample #...: D1K070112-010 Work Order #...: ENF271AA . Matrix..... WATER

 Date Sampled...:
 11/06/01 14:45
 Date Received..:
 11/07/01

 Prep Date....:
 11/07/01
 Analysis Date..:
 11/07/01

 Prep Batch #...:
 1312554
 Analysis Time..:
 22:16

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTING	UNITS
PARAMETER	RESULT	LIMIT	
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene .	ПD	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane'	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	· ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/≟
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: B-75D

Lot-Sample #: D1K070112-010	Work Order #: ENF271AA	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			
1,1,1-Trichloroethane	, ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	1.4	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND '	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	,
Dibromofluoromethane	98	(80,- 120))
1,2-Dichloroethane-d4	100	(72 - 127)	
4-Bromofluorobenzene	95	(79 - 119)	
Toluene-d8	94	(79 - 119)	

QC DATA ASSOCIATION SUMMARY

D1K070112

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 8260B		1312554	1312291
002	WATER	SW846 8260B		1313389	1313194
003	WATER	SW846 8260B		1312554	1312291
004	WATER	SW846 8260B		1312554	1312291
005	WATER	SW846 8260B		1312554	1312291
006	WATER	SW846 8260B		1312554	1312291
007	WATER	SW846 8260B		1312554	1312291
008	WATER	SW846 8260B		1312554	1312291
009	WATER	SW846 8260B		1312554	1312291
010	WATER	SW846 8260B	4	1312554	1312291

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K070112 Work Order #...: ENLNX1AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K080000-554 ENLNX1AD-LCSD

 Prep Date....:
 11/07/01
 Analysis Date..:
 11/07/01

 Prep Batch #...:
 1312554
 Analysis Time..:
 12:32

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	104	(79 - 119)		SW846 8260B
	102	(79 - 119)	2.0 (0-20)	SW846 8260B
Benzene	95	(79 - 119)		SW846 8260B
	96	(79 - 119)	1.6 (0-20)	SW846 8260B
Chlorobenzene	93	(76 - 116)		SW846 8260B
	96	(76 - 116)	3.7 (0-20)	SW846 8260B
Toluene	95	(75 - 122)		SW846 8260B
	97	(75 - 122)	2.1 (0-20)	SW846 8260B
Trichloroethene	97	(81 - 121)		SW846 8260B
	99	(81 - 121)	2.6 (0-20)	SW846 8260B
•		PERCENT	RECOVERY	

	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	100	(80 - 120)	
	101	(80 - 120)	
1,2-Dichloroethane-d4	104	(72 - 127)	
	104	(72 - 127)	
4-Bromofluorobenzene	92 •	(79 - 119)	
	93	(79 - 119)	
Toluene-d8	96	(79 - 119)	
	97	(79 - 119)	
· ·		·	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K070112 Work Order #...: ENLNX1AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K080000-554 ENLNX1AD-LCSD

Prep Date....: 11/07/01 Analysis Date..: 11/07/01 Prep Batch #...: 1312554 Analysis Time..: 12:32

Dilution Factor: 1

	SPIKE	MEASUREI		PERCENT		
PARAMETER	AMOUNT	TRUOMA	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	10.0	10.4	ug/L	104		SW846 8260B
	10.0	10.2	ug/L	102	2.0	SW846 8260B
Benzene	10.0	9.48	ug/L	95		SW846 8260B
	10.0	9.63	ug/L	96	1.6	SW846 8260B
Chlorobenzene	10.0	9.27	ug/L	93		SW846 8260B
	10.0	9.62	ug/L	96	3.7	SW846 8260B
Toluene	10.0	9.54	ug/L	95		SW846 8260B
•	10.0	9.74	ug/L	97	2.1	SW846 8260B
Trichloroethene	10.0	9.67	ug/L	97	•	SW846 8260B
	10.0	9.92	ug/L	99	2.6	SW846 8260B
			PERCENT	RECOVERY	.*	
SURROGATE			RECOVERY	LIMITS	•.	
Dibromofluoromethane	_		100 .	(80 - 120		•
			101	(80 - 120	·)	
1,2-Dichloroethane-d4			104	(72 - 127)	·)	
		,	104	(72 - 127)	
4-Bromofluorobenzene		*	92	(79 - 119	')	
			93	(79 - 119	')	•
Toluene-d8			96	(79 - 119	')	· · · · · · · · · · · · · · · · · · ·
			97	(79 - 119	')	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K070112 Work Order #...: ENNG71AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K090000-389 ENNG71AD-LCSD

Prep Date....: 11/08/01 Analysis Date..: 11/08/01 Prep Batch #...: 1313389 Analysis Time..: 11:26

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	101	(79 - 119)		SW846 8260B
	98	(79 - 119)	3.6 (0-20)	SW846 8260B
Benzene	98	(79 - 119)		SW846 8260B
	• 97	(79 - 119)	1.8 (0-20)	SW846 8260B
Chlorobenzene	96	(76 - 116)	*	SW846 8260B
	93	(76 - 116)	2.8 (0-20)	SW846 8260B
Toluene	98	(75 - 122)		SW846 8260B
	95	(75 - 122)	3.2 (0-20)	SW846 8260B
Trichloroethene	99	(81 - 121)		SW846 8260B
	97	(81 - 121)	1.8 (0-20)	SW846 8260B
		•		
		PERCENT	RECOVERY	
SURROGATE	· •	RECOVERY	LIMITS	
Dibromofluoromethane	a a	106	(80 - 120)	
		102	(80 - 120)	•
1,2-Dichloroethane-d4		109	(72 - 127)	
P		103	(72 - 127)	
4-Bromofluorobenzene		103 96	(72 - 127) (79 - 119)	•
4-Bromofluorobenzene			` '	
4-Bromofluorobenzene Toluene-d8		96	(79 - 119)	
		96 94	(79 - 119) (79 - 119)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K070112 Work Order #...: ENNG71AC-LCS Matrix.....: WATER

LCS Lot-Sample#: D1K090000-389 ENNG71AD-LCSD

 Prep Date....: 11/08/01
 Analysis Date..: 11/08/01

 Prep Batch #...: 1313389
 Analysis Time..: 11:26

Dilution Factor: 1

	SPIKE	MEASUREI)	PERCENT			
PARAMETER	TUDOMA	AMOUNT	UNITS	RECOVERY	RPD	METHO	D
1,1-Dichloroethene	10.0	10.1	ug/L	101 .	*.	SW846	8260B
	10.0	9.77	ug/L	98	3.6	SW846	8260B
Benzene	10.0	9.85	ug/L	98		SW846	8260B
	10.0	9.67	ug/L	97	1.8	SW846	8260B
Chlorobenzene	10.0	9.57	ug/L	96		SW846	8260B
	10.0	9.30	ug/L	93 .	2.8	SW846	8260B
Toluene '	10.0	9.76	ug/L	98		SW846	8260B
	10.0	9.45	ug/L	95	3.2	SW846	8260B
Trichloroethene	10.0	9.89	ug/L	99		SW846	8260B
	10.0	9.71	ug/L	97	1.8	SW846	8260B
		·,	PERCENT	RECOVERY			
SURROGATE			RECOVERY	LIMITS			
Dibromofluoromethane	• . •	• • •	106	(80 - 120)	<u>, </u>		
			102	(80 - 120	•		:
1,2-Dichloroethane-d4			109	(72 - 127)	•		
			103	(72 - 127)	•		
4-Bromofluorobenzene			96	(79 - 119	•		
		•	94	(79 - 119	•		
Toluene-d8		* *	103	(79 - 119	•		
			98	(79 - 119	•		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K070112

Work Order #...: ENLNX1AA

Matrix..... WATER

MB Lot-Sample #: D1K080000-554

Prep Date....: 11/07/01 Prep Batch #...: 1312554 Analysis Time..: 12:08

Analysis Date..: 11/07/01

Dilution Factor: 1

sec-Butylbenzene

•		REPORTIN	NG ,			
PARAMETER	RESULT	LIMIT	UNITS	METHOD		
1,4-Dichlorobenzene	ND .	1.0	ug/L	SW846 8260B		
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B *		
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B		
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B		
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B		
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B		
Benzene	ND	1.0	ug/L	SW846 8260B		
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B		
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B		
Bromoform	ND	1.0	ug/L	SW846 8260B		
Bromomethane	ND	2.0	ug/L	SW846 8260B		
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B		
Chlorobenzene	ND	1.0	ug/L	SW846 8260B		
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B		
Chloroethane	ND	2.0	ug/L	SW846 8260B		
Chloroform	ND	1.0	ug/L	SW846 8260B		
Chloromethane	ND	2.0	ug/L	SW846 8260B		
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B		
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B		
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B		
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B		
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B		
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B		
Ethylbenzene	ND	1.0	ug/L	SW846 8260B		
Methylene chloride	ND	1.0	ug/L	SW846 8260B		
Styrene	ND	1.0	ug/L	SW846 8260B		
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B		
Tetrachloroethene .	ND	1.0	ug/L	SW846 8260B		
Toluene	ND	1.0	ug/L	SW846 8260B		
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B		
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B		
Trichloroethene	ND	1.0	ug/L	SW846 8260B		
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B		
Vinyl chloride	ND	1.0	ug/L	SW846 8260B		
Naphthalene	ND	1.0	ug/L	SW846 8260B		
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B		
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B		
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B		
Bromobenzene	ND	1.0	ug/L	SW846 8260B		
Bromochloromethane	ND	1.0	ug/L	SW846 8260B '		
,	375	1 0	17	CHOAC BOCOD		

(Continued on next page)

ug/L

SW846 8260B

ND

GC/MS Volatiles

Client Lot #: D1K070112	Work Order #: ENLNX1AA	Matrix WATER
	•	
		y

	**	REPORTI	NG		
PARAMETER	RESULT	LIMIT	UNITS	METHOD	,
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B	
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B	•
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B	
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B	
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromomethane	ND	1.0	ug/L	SW846 8260B	
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B	
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dibromo-3-	ND	2.0	ug/L	SW846 8260B	
chloropropane (DBCP)	•		-,		
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trichloro-	ND	1.0	· ug/L	SW846 8260B	
benzene					
1,2,4-Trimethylbenzene	ND	1.0	· ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
o-Xylene	ND	1.0	ug/L	SW846 8260B	
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B	
	PERCENT	RECOVERY	7		
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	107	(80 - 12	20)	4	
1,2-Dichloroethane-d4	104	(72 - 12)			
4-Bromofluorobenzene	99	(79 - 11	•		
Toluene-d8	105	(79 - 11	,		
		,	•		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K070112 Work Order #...: ENNG71AA Matrix.....: WATER

MB Lot-Sample #: D1K090000-389

Prep Date....: 11/08/01 Analysis Time..: 12:14

Analysis Date..: 11/08/01 Prep Batch #...: 1313389

Dilution Factor: 1

* .		REPORTING	G	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	- ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW845 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/≟	SW846 8260B ·
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 82603
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND 4	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND .	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ИD	1.0	\mathtt{ug}/\mathtt{L}	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	${\tt ug/L}$	SW846 8260B

(Continued on next page)

GC/MS Volatiles

Work Order #...: ENNG71AA

Matrix....: WATER

*.		REPORTI	NG .			
PARAMETER	RESULT	LIMIT	UNITS	METHOD	METHOD	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8	260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8		
Tetrachloroethene	ND .	1.0	ug/L	SW846 8	260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8	260B	
1,2,4-Trichloro-	ND	1.0	ug/L	SW846 8	260B	
benzene	H					
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8		
1,1,2-Trichloroethane	ND .	1.0	ug/L	SW846 8	3260B	
Frichloroethene	ND	1.0	ug/L	SW846 8	3260B	
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8		
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8	3260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8	3260B	
Jinyl chloride	ND	1.0	ug/L	SW846 8	3260B	
o-Xylene .	ND	1.0	ug/L	SW846 8	3260B ,	
n-Xylene & p-Xylene	ND	2.0	ug/L	.SW846 8	3260B	
1,2-Dibromo-3- chloropropane (DBCP)	ND	2.0	ug/L	SW846 8	3260B	
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8	3260B	

PERCENT

100

101

96

97

RECOVERY

RECOVERY

(80 - 120)

(72 - 127)

(79 - 119)

(79 - 119)

LIMITS

NOTE(S):

SURROGATE

Toluene-d8

Dibromofluoromethane

1,2-Dichloroethane-d4

4-Bromofluorobenzene

Client Lot #...: D1K070112

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Work Order #...: EM48W1AC-MS Matrix....: WATER Client Lot #...: D1K070112

MS Lot-Sample #: D1J310211-002 EM48W1AD-MSD

Date Sampled...: 10/30/01 11:40 Date Received..: 10/31/01 Prep Date....: 11/07/01 Analysis Date..: 11/07/01 Analysis Time..: 16:15

94

98

96

Prep Batch #...: 1312554 Dilution Factor: 1

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	101	(79 - 119)		•	SW846 8260B
	97	(79 - 119)	3.8	(0-20)	SW846 8260B
Benzene	97	(79 - 119)			SW846 8260B
	95	(79 - 119)	2.1	(0-20)	SW846 8260B
Chlorobenzene	96	(76 - 116)			SW846 8260B
•	93	(76 - 116)	2.2	(0-20)	SW846 8260B
Toluene	97	(75 - 122)			SW846 8260B

(75 - 122)

(81 - 121)

(81 - 121)

(0-20)

(0-20)

SW846 8260B

SW846 8260B

SW846 8260B

2.5

1.9

	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	102	(80 - 120)	*
•	100	(80 - 120)	
1,2-Dichloroethane-d4	. 103	(72 - 127)	
	101	(72 - 127)	*
4-Bromofluorobenzene	98	(79 - 119)	
	98	(79 - 119)	ii
Toluene-d8	99	(79 - 119)	
	98	(79 - 119)	•

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Trichloroethene

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K070112 Work Order #...: EM48W1AC-MS Matrix..... WATER

MS Lot-Sample #: D1J310211-002 EM48W1AD-MSD

 Date Sampled...:
 10/30/01 11:40
 Date Received...:
 10/31/01

 Prep Date.....:
 11/07/01
 Analysis Date...:
 11/07/01

 Prep Batch #...:
 1312554
 Analysis Time...:
 16:15

Dilution Factor: 1

	a					*,			
	SAMPLE	SPIKE	MEASRD		PERCENT	-			
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOI)	
1,1-Dichloroethene	ND	10.0	10.3	ug/L	101		SW846	8260B	
	ND	10.0	9.91	ug/L	97	3.8	SW846	8260B	
Benzene	ND	10.0	9.66	ug/L	97		SW846	8260B	
	ND	10.0	9.47	ug/L	95	2.1	SW846	8260B	
Chlorobenzene	ND	10.0	9.56	ug/L	96		SW846	8260B	
	ND	10.0	9.34	ug/L	93	2.2	SW846	8260B `	
Toluene	ND	10.0	9.66	ug/L	97		SW846	8260B	
	ND	10.0	9.42	ug/L	94	2.5	SW846	8260B	
Trichloroethene	ND	10.0	9.83	ug/L	98		SW846	8260B	
	ND	10.0	9.64	ug/L	96	1.9	SW846	8260B	
			PERCENT		RECOVERY				
SURROGATE			RECOVER	Y	LIMITS				. 4
Dibromofluoromethane	 		102	-	(80 - 120)	 2)	•		- (
			100		(80 - 120	•		•	
1,2-Dichloroethane-d4			103		(72 - 12)	•			
			101		(72 - 12)	7)		•	
4-Bromofluorobenzene		•	98		(79 - 119		•	trip.	
			98		(79 - 119	€)			
Toluene-d8			99		(79 - 119	€)	•		
			98		(79 - 119))			

NCTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K070112 Work Order #...: EM5PN1AF-MS Matrix..... WATER

RECOVERY

LIMITS

RPD LIMITS

(79 - 119)

RPD

MS Lot-Sample #: D1J310270-007 EM5PN1AG-MSD

 Date
 Sampled...:
 10/30/01
 10:25
 Date
 Received...:
 10/31/01

 Prep
 Date...:
 11/08/01
 Analysis
 Date...:
 11/08/01

 Prep
 Batch #...:
 1313389
 Analysis
 Time...:
 13:38

PERCENT

RECOVERY

Dilution Factor: 20

PARAMETER

1,1-Dichloroethene	97	(79 - 119)			SW846	8260B	
	100	(79 - 119)	2.6	(0-20)	SW846	8260B	
Benzene	76 a	(79 - 119)			SW846	8260B	•
	91	(79 - 119)	3.6	(0-20)	SW846	8260B	
Chlorobenzene	90	(76 - 116)			SW846	8260B	
	95	(76 - 116)	4.8	(0-20)	SW846	8260B	
Toluene	90	(75 - 122)			SW846	8260B	
	95	(75 - 122)	4.6	(0-20)	SW846	8260B	
Trichloroethene	95	(81 - 121)			SW846	8260B	•
	97	(81 - 121)	2.2	(0-20)	SW846	8260B	
		PERCENT		RECOVERY			
SURROGATE		RECOVERY		LIMITS	_		
Dibromofluoromethane	*	97		(80 - 120)		
•	•	105		(80 - 120)		
1,2-Dichloroethane-d4		102		(72 - 127)		
		106		(72 - 127)		
4-Bromofluorobenzene		97		(79 - 119) .	,	
		104		(79 - 119)		
Toluene-d8		92		(79 - 119)		

100

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K070112 Work Order #...: EM5PN1AF-MS Matrix....: WATER

MS Lot-Sample #: D1J310270-007 EM5PN1AG-MSD

 Date Sampled...:
 10/30/01
 10:25
 Date Received...:
 10/31/01

 Prep Date.....:
 11/08/01
 Analysis Date...:
 11/08/01

 Prep Batch #...:
 1313389
 Analysis Time...:
 13:38

Dilution Factor: 20

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO	D .
1,1-Dichloroethene	ND	200	195	ug/L	97		SW846	8260B
	ND	200	200	ug/L	100	2.6	SW846	8260B
Benzene	620	200	774	ug/L	76 a	•	SW846	8260B
	620	200	803	ug/L	91	3.6	SW846	8260B
Chlorobenzene	ND	200	181	ug/L	90		SW846	8260B
	ND	200	190	ug/L	95	4.8	SW846	8260B
Toluene	ND	200	197	ug/L	90		SW846	8260B
•	ND	200	207	ug/L	95	4.6	SW846	8260B
Trichloroethene	ND	200	189	ug/L	95		SW846	8260B
	ND	200	193	ug/L	<u>9</u> 7	2.2	SW846	8260B
								•
•			PERCENT		RECOVERY			
SURROGATE			RECOVER	<u>Y</u>	LIMITS			
Dibromofluoromethane			97		(80 - 120) ·		
			105		(80 - 120)		
1,2-Dichloroethane-d4			102		(72 - 12)	7)		
•			106		(72 - 12)	7)		
4-Bromofluorobenzene			97		(79 - 119	9)		
			104		(79 - 119	9)		
Toluene-d8			92		(79 - 119	∍)		
			100		(79 - 119	€)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

a Spiked analyte recovery is outside stated control limits.

HOLD TIME REPORT

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

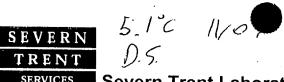
Lab: GCMS VOA

Lab ID #	Well ID	Collection Date	Method	Ext	Ana Dif	Ext Hold	Ana Hold	Extraction Date	Analysis Date		Method Description
D1K070112001	B-71D	11/06/01	 L0:35								-
		•	8260B		1		14		11/07/01	18:39	VOA
D1K070112002	B-71S	11/06/01 1	10:45								
			8260B		2		14		11/08/01	12:49	VOA
D1K070112003	B-72S	11/06/01 1	L1:08								
	•		8260B		1		14		11/07/01	19:27	AOV
D1K070112004	B-72D	11/06/01 1	11:15							•	-
			8260B		1		14		11/07/01	19:51	VOA
D1K070112005	B-73S	11/06/01 1	.1:50					•			
			8260B		1		14		11/07/01	20:15	VOA .
D1K070112006	B-73D	11/06/01 1	.2:15								
			8260B		. 1		14		11/07/01	20:39	AOV
D1K070112007	B-745	11/06/01 1	.3:45								
			8260B		1		14		11/07/01	21:03	VOA
D1K070112008	B-74D	11/06/01 1	.4:00	* .					-		,
			8260B		1		14		11/07/01	21:27	VOA
D1K070112009	B-75S	11/06/01 1	4:35		*			•			
			8260B		. 1		14		11/07/01	21:52	VOA
D1K070112010	B-75D	11/06/01 1	4:45								
			8260B		1		14		11/07/01	22:16	VOA

Chain of Custody Record

Comments

STL Denver 4955 Yarrow Street Arvada, CO 80002



Custoay Recora	Arvada,	CO 800)2								Ī	SER	VICES		Sevi	arn T	roni	t I ah	orat	tories,	Inc
STL-4124 (0700) DEN (0900)					~	• .				,	_						1611	Lau	Urai	.ones,	Inc
Client C. L. K. L. Charles T.		Project	Manage 4 y one Nun	-	N/	,	(\sim			7	Date	1,1		С	hain of Cu			
Safety-Kleen (Wichia) Inc	· racilif	Teleph	<u>qy</u> one Nun	l ac nber (A	rea Co	h e /	x Num	ber ber	eron	~ (c	/4 L	LC	1	ab Nu	/6/0		•	04	118	30	
2549 North New York Avenu-	<u> </u>	30	3 - 9	38	-5.	535	- <i>/</i> :	303	-43	8 - .	<u>ر د</u> ک	20		-00 14(1)	ilbei		F	Page	/_	_ of	2
2549 North New York Avenu- City State Zip Wichita KS & Project Name and Location (State)	Code 7719	Site Co	ntact			Lab	Contac	ct	ler						tach lis s need			<u> </u>			
Project Name and Location (State)	,,,,,	Carrier	S & Waybill	Numbe	4 1		ue	700	170	[B							1			
S-K Wich, the Facility Wich Contract/Purchase Order/Quote No.	ita K.	5. 1			<u></u>						260							Sn	ecial :	Instruction	ns/
Contract/Purchase Order/Quote No.				Matrix	:			ontaine eserva			انت							Cor	ndition	ns of Rece	∍ipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Aureous	Sed	Soil	Unpres	H2SO4	HG HG	NaOH ZnAc/	VaO.	10 C						,			•	
SK-SW·IA	11/6/01	07:30	Х					X			X							Roc	ilor	TAT	
SK-SW-2A	11/6/01	07:50	X					χ	-		X							1			
SK-SW-3A	11/6/01	08:10	X					X			X										
SK-SW-4A	11/6/01	08:3u	X					X			X										
SK-SW-5A	11/6/01	08:50	X					X			X			1.					\neg		
SK-5W-5Z	11/6/01	08:55	X					X		1.	X								1		
B-710	11/6/61	10:35	X					X			X							24	110	TAT	- (x)
B-715	11/6/01	10:45	X					X			X								F		
B-725	11/6/01	11:08	X					X			X								\neg		
B-72 0	11/6/01	11:15	X					X			X								\neg		
B-23 S	11/6/01	11:50	X					X			X	• .							\top		
B-73 D	11/6/01	12:15	X					X			X								V		
Possible Hazard Identification Non-Hazard	□ Poison B	Unknown	,	ole Dis _i		a, F	ا مند	nonal B	ı l ob		A zahû			4446	(A le	e may be er than 3	assess	ed if samp	oles are	retained	
Turn Around Time Required				Ctani	ro Che		QC Re	quirem	ents (S)	pecify)											
1 Robus 48 Hours 7 Days 14 De	iys 🗌 21 Day	∕s ☐ Oth Date	er	, Tim			<u>(PP)</u>	(11)	KAY	1/1	usch	r in	redic	9/2/ _{>}	, W/	verla	Lres.	Uts 1	1 Y	100.7 11/	8/0
1 Relings Specified By 2. Relings Specified By 2. Relings Specified By		11/	6/01		" ′∵Z <u>e</u>	,	1. Kec	eivea E	7/1		3/2	int			•			Date / ()	7/a	100.9 11 Time) 50.
2. Relinquished By		Date		Tun			2. Rec	eived E	у								-	Date	<i>\(\(\frac{1}{2} \)</i>	Time	
3. Relinquished By				Tim	e		3. Rec	eived E	У									Date		Time	
		1		1																1	

Chain of **Custody Record**

STL Denver 4955 Yarrow Street Arvada, CO 80002

SEVERN
TRENT
CEDVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700) DEN (0900)			•								at it	AICES	•	Sev	ern	Tre	nt La	abora	atori	es, Inc.
Client SAfety-Kleen (Wishing) Inching Inching 2549 North New York Ave City Wiching Its Expression (State) Project Name and Location (State)	Facilit	Project KA	t Manage	r <u>wch</u> ber (Area C	9	Can	ew	n- (o/z	LL		D	ate	6/	0/		Chain o	of Custody	Number	,
2549 North Now York A	<i>*</i>	Telepi	fone Num	ber (Area C	ode)/Fa	x Num	ber					Lá	ab Num	nber			j			
City State Zip	Code	Site C	-93	y - 553	35	/ 3	303	936	4-5	52	0						Page .	2	of	2_
Wichita Its &	7219	Rus	sel L	Number	H	Contai 4 L	Yeg	len				Analys nore sp	is (Atta ace is	ach lis need	st if led)					
S-K Wichita Factlity Wichi	ta, KS	Carriei	r/Waybill I	Vumber			-			90			ŀ							
Contract Principals Order Quote No 7 7			/	Matrix			ontaine eserva			271								Special Conditio	I Instru ons of I	ctions/ Receipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Aueous	Sed	Unpres.	H2SO4		NaOH ZnAc: NaOH		(201)										
B-745	11/6/61	1345	Х				X	Z NZ		7	1-1-	- 	_	+-		++	-	1 44 1		
B-740	11/6/01	1400	X		+++		$\frac{1}{X}$			`				+				. Y h	<u> </u>	ATS
B-755		1435	X		+					<u>X</u>			_	-		- -				
B-750	1/1/1	1445	\(\frac{1}{X} \)				X		1	Υ		+				44				
	7 6/6/	1773					X	_		X _							-	V	/	
			_		44	- -	4-4		_ _								R	eguh	- T	AT
				_ _ _	-	_ _	\perp							\perp]					7	
	-	· · · · · · ·			\perp											TT			1	t
																			1	
TO							1.							1.		11	- 		 	
TB-01		\triangle	X				X		λ	(† †		\Box	_	1-1-		· .	_	
-									K			+		1-1	+	++			<u> </u>	
					11		1 1	++		+	-	╁	+	+		++			· · ·	
Possible Hazard Identification				Disposal	ــــــــــــــــــــــــــــــــــــــ		ــــــــــــــــــــــــــــــــــــــ			لــــــــــــــــــــــــــــــــــــــ		11					<u>.l</u>			
☐ Non-Hazard ☐ Frammable ☐ Skin Irritant ☐ Turn Around Time Required	Poison B	Unknown	Ret	urn To Clier		Dispo	osal By	Lab	☐ Arc	hive F	or	м	onths	(A le	e may t er than	e asses 3 month	ssed if sa	mples are	retaínec	.
24 Hours 🔲 48 Hours 🔲 7 Days 💢 14 Day	s 🗌 21 Days	Othe	or		K	C Req	juireme	nts (Spe	cify)	/		1. 1	, ,	/ .			· · · · ·			
24 Hours 48 Hours 7 Days 14 Day 1 Reling of the By Gire Server 2 Relinguished By		Date		Time 4:30	\ <u>\</u>	Recei	iyed By	1/1	408C	her.	/Mmi	diste	14	700	V611	resu	Dale	y no	Time	18/01 703
2 Relinquished By	· · · · · · · · · · · · · · · · · · ·	Date	/ 0/	Time	2	. Recei	ived By	101,		<u> </u>	rrb	7	-				(C	07/01	Time	705
3 Relinquished By		Date		Time	-								•						, iiiie	
2				Tane	3	. ĸecei	ived By										Date		Time	
Comments																	<u></u>	_	<u> </u>	
4						}														



STL Denver

4955 Yarrow Street Arvada, CO 80002-4517

Tel: 303 736 0100 Fax: 303 431 7171 www.stl-inc.com

ANALYTICAL REPORT

SAFETY KLEEN (WICHITA, KS)

Lot #: D1K070130

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue, Suite 100 Boulder, CO 80301

SEVERN TRENT LABORATORIES, INC.

Kae E. Yoder Project Manager

November 28, 2001

This report shall not be reproduced except in full, without the written approval of the laboratory

Invoice

STL Denver 4955 Yarrow Street Arvada,CO 80002 (303) 421-6611

Tel:

Fax:

(303) 431-7171

REMIT TO: "

Severn Trent Laboratories, Inc. P.O. Box 7777 W4305 Philadelphia, PA 19175-4305

Bill To:

John Arbuthnot Safety Kleen Inc 13351 Scenic Highway Baton Rouge, LA 70807

> Matrix Code

WATER

Analysis Description

WATER, Volatile Organics, 8260B 1 cooler shipment - RUSH SEVERN TRENT SERVICES

Number

28032651

Date

28 NOV 01

STL Project Number

D1K070130

Customer Number 00408171

erms

NET 30 DAYS

Customer Contact

SAMPLE RECEIVING DATE : 11/07/01

REPORT DATE : 11/26/01

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue Suite 100 Boulder, CO 80301

Unit Price

Extended Price

97.00

679.00

32.09

NOTE:

Applicable samples will be stored at no extra charge for a period of 30 days following the final report. Samples will be properly disposed of after 30 days, unless notified otherwise in writing.

Please reference Invoice number when remitting.

Customer P.O. Number / Contract Number / Reference

STL Project Manager Kae Yoder

Salesperson

Sub Total Tax

Total

711.09

DUPLICATE COPY

Severn Trent Laboratories, Inc.

Table Of Contents

Standard Deliverables

Report Contents

Total Number of Pages

Standard Deliverables

The Cover Letter and the Report Cover page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.

31

- Table of Contents
- Case Narrative
- Executive Summary Detection Highlights
- Methods Summary
- Method/Analyst Summary
- Lot Sample Summary
- Analytical Results
- QC Data Association Summary
- Hold Time Report
- Chain-of-Custody

CASE NARRATIVE

Client Name:

Safety-Kleen (Wichita)

Project Name:

Project Number:

Sample Delivery Group: Narrative Date: D1K070130

Namanive Date:

11/28/01

Sample Receipt

- Six water samples and one trip blank, submitted by Safety-Kleen (Wichita), Inc., were received by STL Denver on November 7, 2001, according to documented sample acceptance procedures. The samples were received intact at a temperature of 5.1 °C. Analyses requested on the associated chains-of-custody are as follows: GC/MS Volatiles. No anomalies were encountered during sample receipt.
- > Results for additional samples listed on the chains-of-custody are reported under separate cover.

GC/MS Volatiles

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
SK-SW-1A	cis-1,2-Dichloroethene	11	1.0	ug/L
	Tetrachloroethene	1.0	1.0	ug/L
	Trichloroethene	4.3	1.0	ug/L
	1,1,1-Trichloroethane	1.2	1.0	ug/L
SK-SW-2A	Benzene	3.3	1.0	ug/L
	1,1-Dichloroethane	1.2	1.0	ug/L
	cis-1,2-Dichloroethene	23	1.0	ug/L
	Tetrachloroethene	2.1	1.0	ug/L
	1,1,1-Trichloroethane	3.2	1.0	ug/L
	Trichloroethene	4.4	1.0	ug/L
	Vinyl Chloride	1.1	1.0	ug/L
SK-SW-3A	cis-1,2-Dichloroethene	1.6	1.0	ug/L
	Tetrachloroethene	1.7	1.0	ug/L

> The samples were analyzed within holding time and without incident.

These data and reporting limits are being used specifically to meet the needs of this project. All RLs are supported by STL Denver's Method Detection Limits (MDLs). Reporting limits in this report are at or above the MDL.

I certify that the data presented in this report are accurate, complete, and meets the minimum quality assurance standards in 40-CFR 136, 40-CFR 141, and/or SW846. The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. An assessment of the quality of the data, noting any exceptions, outliers, and/or problems encountered have been narrated herein.

Kae E. Yoder

Project Manager

1/ / 28/0

EXECUTIVE SUMMARY - Detection Highlights

D1K070130

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SK-SW-1A 11/06/01 07:30 001				
cis-1,2-Dichloroethene Tetrachloroethene Trichloroethene 1,1,1-Trichloroethane	11 1.0 4.3 1.2	1.0 1.0 1.0	ug/L ug/L ug/L ug/L	SW846 8260B SW846 8260B SW846 8260B SW846 8260B
SK-SW-2A 11/06/01 07:50 002				
Benzene 1,1-Dichloroethane cis-1,2-Dichloroethene Tetrachloroethene 1,1,1-Trichloroethane Trichloroethene Vinyl chloride SK-SW-3A 11/06/01 08:10 003	3.3 1.2 23 2.1 3.2 4.4	1.0 1.0 1.0 1.0 1.0	ug/L ug/L ug/L ug/L ug/L ug/L	SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B
cis-1,2-Dichloroethene Tetrachloroethene	1.6 1.7	1.0	ug/L ug/L	SW846 8260B SW846 8260B

METHODS SUMMARY

D1K070130

PARAMETER ANALYTICAL PREPARATION METHOD METHOD

Volatile Organics by GC/MS SW846 8260B SW846 5030B/826

References:

SW846

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

D1K070130

ANALYTICAL
METHOD
ANALYST
ID

SW846 8260B
Mike G. Hoffman
001880

References:

SW846
"Test Methods for Evaluating Solid Waste, Physical/Chemical

Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

D1K070130

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
ENF5H	001	SK-SW-1A	11/06/01	07:30
ENF5N	002	SK-SW-2A	11/06/01	
ENF5R	003	SK-SW-3A	11/06/01	
ENF58	004	SK-SW-4A	11/06/01	
ENF6C	005	SK-SW-5A	11/06/01	
ENF6D	006	SK-SW-5Z	11/06/01	
ENF6E	007	TB-01	11/06/01	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Client Sample ID: SK-SW-1A

GC/MS Volatiles

Lot-Sample #...: D1K070130-001 Work Order #...: ENF5H1AA Matrix..... WATER

Date Sampled...: 11/06/01 07:30 Date Received..: 11/07/01 Prep Date....: 11/13/01 Analysis Date..: 11/13/01 Prep Batch #...: 1319224 Analysis Time..: 14:31

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTI	1G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	${\tt ug/L}$
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND .	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0 , .	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	${ t ug/L}$
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene	. 11	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	$\mathtt{ug/L}$
Isopropylbenzene	ND	1.0	. ug/L
p-Isopropyltoluene	ND,	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

(Continued on next page)

Client Sample ID: SK-SW-1A

GC/MS Volatiles

Lot-Sample #: D1K070130-001	Work Order #: ENF5H1AA	Matrix
-----------------------------	------------------------	--------

		REPORTIN	īG	
PARAMETER	RESULT	LIMIT	UNITS	
n-Propylbenzene	ND -	1.0	ug/L	
Styrene	ND .	1.0	ug/L	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	
Tetrachloroethene	1.0	1.0	ug/L	
Toluene	ND	1.0	ug/L	
1,2,3-Trichlorobenzene	ND	1.0	ug/L .	
1,2,4-Trichloro-	ND	1.0	ug/L	
benzene				
Trichloroethene	4.3	1.0	ug/L	
1,2,3-Trichloropropane	ND	1.0	ug/L	
1,1,1-Trichloroethane	1.2	1.0	ug/L	
1,1,2-Trichloroethane	ND	1.0	ug/L	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	
Vinyl chloride	ND	1.0	ug/L	
o-Xylene	ND	1.0	ug/L	
m-Xylene & p-Xylene	ND	2.0	ug/L	
1,2-Dibromo-3-	ND	2.0	ug/L	
chloropropane (DBCP)				
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	
	PERCENT	RECOVERY	•	
SURROGATE	RECOVERY	LIMITS	<u> </u>	
Dibromofluoromethane	96	(80 - 120	0) :	
1,2-Dichloroethane-d4	93	(72 - 12	7)	
4-Bromofluorobenzene	94	(79 - 119	9)	
Toluene-d8	104	(79 - 119	a 1	

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	96	(80 - 120)
1,2-Dichloroethane-d4	93	(72 - 127)
4-Bromofluorobenzene	94	(79 - 119)
Toluene-d8	104	(79 - 119)

Client Sample ID: SK-SW-2A

GC/MS Volatiles

Lot-Sample #...: D1K070130-002 Work Order #...: ENF5N1AA Matrix..... WATER

Date Sampled...: 11/06/01 07:50 Date Received..: 11/07/01 Prep Date....: 11/13/01 Analysis Date..: 11/13/01 Prep Batch #...: 1319224 Analysis Time..: 16:38

Dilution Factor: 1

Method..... SW846 8260B

REPORTING PARAMETER RESULT LIMIT UNITS Benzene 3.3 1.0 uq/L Bromochloromethane ND 1.0 uq/L Bromodichloromethane ND 1.0 ug/L Bromoform ND 1.0 ug/L Bromobenzene ND 1.0 ug/L Bromomethane ND 2.0 ug/L n-Butylbenzene ND 1.0 ug/L sec-Butylbenzene ND 1.0 ug/L tert-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 uq/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chloroethane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chloromethane 2.0 ND ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 uq/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane 1.2 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L cis-1,2-Dichloroethene 23 1.0 ug/L trans-1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ' ND 1.0 uq/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L Naphthalene ND ug/L

(Continued on next page)

Client Sample ID: SK-SW-2A

GC/MS Volatiles

TOC-Bampie # DIKO/0130-002	HOLK OLUCE # ENFONIAA	MAILK

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	2.1	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene			
1,1,1-Trichloroethane	3.2	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene '	4.4	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	· ug/L
Vinyl chloride	1.1	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	<u>.</u>
Dibromofluoromethane	102	(80 - 120))
1,2-Dichloroethane-d4	105 -	(72 - 127	7)
4-Bromofluorobenzene	98	(79 - 119	9)
Toluene-d8	102	(79 - 119	9)

Client Sample ID: SK-SW-3A

GC/MS Volatiles

Lot-Sample #...: D1K070130-003 Work Order #...: ENF5R1AA Matrix..... WATER

Date Sampled...: 11/06/01 08:10 Date Received..: 11/07/01 Prep Date....: 11/13/01 Analysis Date..: 11/13/01 Prep Batch #...: 1319224 Analysis Time..: 16:59

Dilution Factor: 1

Method..... SW846 8260B

	•	REPORTII	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chlorobenzene	ND ,	1.0	ug/L
Chloroform	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	1.6	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	· ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

(Continued on next page)

Client Sample ID: SK-SW-3A

GC/MS Volatiles

Lot-Sample #: D1K070130-003	Work Order #: ENF5R1AA	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	1.7	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND .	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene	•	·	
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L ·
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	1.0	ug/L '
GITD DOG A TITL	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	100	(80 - 120)	
1,2-Dichloroethane-d4	100	(72 - 127)	
4-Bromofluorobenzene	99	(79 - 119)	•
Toluene-d8	100	(79 - 119)	

Client Sample ID: SK-SW-4A

GC/MS Volatiles

Lot-Sample #...: D1K070130-004 Work Order #...: ENF581AA Matrix..... WATER

Date Sampled...: 11/06/01 08:30 Date Received..: 11/07/01
Prep Date....: 11/13/01 Analysis Date..: 11/13/01
Prep Batch #...: 1319224 Analysis Time..: 17:20

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTI	1G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND .	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	uq/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND .	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L ·
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

(Continued on next page)

Client Sample ID: SK-SW-4A

GC/MS Volatiles

Lot-Sample #: D1K070130-004	Work Order #: ENF581AA	Matrix: WATER

	· ·	REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
n-Propylbenzene	ND	1.0	ug/L	
Styrene	ND	1.0	ug/L	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	
Tetrachloroethene	ND	1.0	ug/L	
Toluene	ND	1.0	ug/L	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	
1,2,4-Trichloro-	ND	1.0	ug/L	
benzene			49/2	
1,1,1-Trichloroethane	ND	1.0	uq/L	
1,1,2-Trichloroethane	ND	1.0	ug/L	
Trichloroethene	ND	1.0	ug/L	
1,2,3-Trichloropropane	ND	1.0	ug/L	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	
Vinyl chloride	ND	1.0	ug/L	
o-Xylene	ND	1.0	ug/L	
m-Xylene & p-Xylene	ND	2.0	ug/L	
1,2-Dibromo-3-	ND	2.0	ug/L	
chloropropane (DBCP)			-	
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	
•				٠.
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	101	(80 - 120)		
1,2-Dichloroethane-d4	102	(72 - 127)		_÷ .
4-Bromofluorobenzene	96	(79 - 119)		
Toluene-d8	98	(79 - 119)		

Client Sample ID: SK-SW-5A

GC/MS Volatiles

Lot-Sample #...: D1K070130-005 Work Order #...: ENF6C1AA Matrix..... WATER

 Date
 Sampled...:
 11/06/01 08:50
 Date Received...:
 11/07/01

 Prep
 Date...:
 11/13/01
 Analysis Date...:
 11/13/01

 Prep
 Batch #...:
 1319224
 Analysis Time...:
 17:41

Dilution Factor: 1

Method..... SW846 8260B

		REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L

(Continued on next page)

Client Sample ID: SK-SW-5A

GC/MS Volatiles

Lot-Sample #: D1K070130-005 Work Order #: ENF6C1AA Matrix	: WATER
---	---------

· C		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
p-Isopropyltoluene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene	s*		
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND .	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	•
Dibromofluoromethane	102	(80 - 120)	
1,2-Dichloroethane-d4	103	(72 - 127)	•
4-Bromofluorobenzene	98	(79 - 119)	¥ .
Toluene-d8	100	(79 - 119)	. •

Client Sample ID: SK-SW-5Z

GC/MS Volatiles

Lot-Sample #...: D1K070130-006 Work Order #...: ENF6D1AA Matrix..... WATER

Date Sampled...: 11/06/01 08:55 Date Received..: 11/07/01
Prep Date....: 11/13/01 Analysis Date..: 11/13/01
Prep Batch #...: 1319224 Analysis Time..: 18:03

Dilution Factor: 1

Method.....: SW846 8260B

REPORTING

		THE ON TING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

(Continued on next page)

Client Sample ID: SK-SW-5Z

GC/MS Volatiles

Lot-Sample #: D1K070130-006	Work Order	#: ENF6D1AA	Matrix:	WATER
-----------------------------	------------	-------------	---------	-------

		REPORTING			
PARAMETER	RESULT	LIMIT	UNITS		
n-Propylbenzene	ND	1.0	ug/L		
Styrene	ND .	1.0	ug/L		
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L		
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L		
Tetrachloroethene	ND	1.0	ug/L		
Toluene	ND	1.0	ug/L		
1,2,3-Trichlorobenzene	ND	1.0	ug/L		
1,2,4-Trichloro-	ND ·	1.0	ug/L		
benzene			J		
1,1,1-Trichloroethane	ND	1.0	ug/L		
1,1,2-Trichloroethane	ND	1.0	ug/L		
Trichloroethene	ND	1.0	ug/L		
1,2,3-Trichloropropane	ND	1.0	ug/L		
1,2,4-Trimethylbenzene	ND	1.0	ug/L		
1,3,5-Trimethylbenzene	ND	1.0	ug/L		
Vinyl chloride	ND	1.0	ug/L		
o-Xylene	ND	1.0	ug/L		
m-Xylene & p-Xylene	ND	2.0	ug/L		
1,2-Dibromo-3-	ND	2.0	ug/L		
chloropropane (DBCP)			. J.		
1,2-Dibromoethane (EDB)	ND	1.0	ug/L		
			J.		
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	103	(80 - 120)			
1,2-Dichloroethane-d4	105	(72 - 127)			
4-Bromofluorobenzene	97	(79 - 119)			
Toluene-d8	99	(79 - 119)			

Client Sample ID: TB-01

GC/MS Volatiles

Lot-Sample #...: D1K070130-007 Work Order #...: ENF6E1AA Matrix..... WATER

 Date Sampled...:
 11/06/01
 Date Received..:
 11/07/01

 Prep Date....:
 11/13/01
 Analysis Date..:
 11/13/01

 Prep Batch #...:
 1319224
 Analysis Time..:
 18:24

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTIN	1G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
·cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: TB-01

GC/MS Volatiles

Lot-Sample #: D1K070130-007	Work Order #: ENF6E1AA	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTING	;
PARAMETER	RESULT	LIMIT	UNITS
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene		• .	
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)	4		
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
•			·
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	_
Dibromofluoromethane	101	(80 - 120)	
1,2-Dichloroethane-d4	102	(72 - 127)	
4-Bromofluorobenzene	97	(79 - 119)	
Toluene-d8	100	(79 - 119)	

QC DATA ASSOCIATION SUMMARY

D1K070130

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 8260B		1319224	1319076
002	WATER	SW846 8260B		1319224	1319076
003	WATER	SW846 8260B		1319224	1319076
004 .	WATER	SW846 8260B	<u>.</u>	1319224	1319076
005	WATER	SW846 8260B		1319224	1319076
006	WATER	SW846 8260B		1319224	1319076
007	WATER	SW846 8260B		1319224	1319076

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K070130 Work Order #...: EN1PQ1AC-LCS Matrix....: WATER

LCS Lot-Sample#: D1K150000-224 EN1PQ1AD-LCSD

Prep Date....: 11/13/01 Analysis Date..: 11/13/01 Analysis Time..: 13:12

Prep Batch #...: 1319224 Dilution Factor: 1

	PERCENT	RECOVERY		RPD	•
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	97	(79 - 119)			SW846 8260B
	99	(79 - 119)	2.2	(0-20)	SW846 8260B
Benzene	104	(79 - 119)			SW846 8260B
	105	(79 - 119)	1.0	(0-20)	SW846 8260B
Chlorobenzene	85	(76 - 116)			SW846 8260B
	84	(76 - 116)	0.55	(0-20)	SW846 8260B
Toluene	100	(75 - 122)		•	SW846 8260B
	101	(75 - 122)	0.66	(0-20)	SW846 8260B
Trichloroethene	106	(81 - 121)			SW846 8260B
	108	(81 - 121)	1.4	(0-20)	SW846 8260B
		PERCENT	RECOVE	ERY	
SURROGATE		RECOVERY	LIMITS	5 .	
Dibromofluoromethane	•	9.9	700	1201	

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	99	(80 - 120)
	99	(80 - 120)
1,2-Dichloroethane-d4	99	(72 - 127)
	98	(72 - 127)
4-Bromofluorobenzene	95	(79 - 119)
	96	(79 - 119)
Toluene-d8	100	(79 - 119)
	100	(79 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K070130 Work Order #...: EN1PQ1AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K150000-224 EN1PQ1AD-LCSD

 Prep Date....: 11/13/01
 Analysis Date..: 11/13/01

 Prep Batch #...: 1319224
 Analysis Time..: 13:12

Dilution Factor: 1

	SPIKE	MEASUREI		PERCENT				
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHO:	D	
1,1-Dichloroethene	10.0	9.70 .	ug/L	97	-	SW846	8260B	
	10.0	9.92	ug/L	99	2.2	SW846	8260B	
Benzene	10.0	10.4	ug/L	104		SW846	8260B	
	10.0	10.5	ug/L	105	1.0	SW846	8260B	
Chlorobenzene	10.0	8.50	ug/L	85	*	SW846	8260B	
	10.0	8.45	ug/L	84	0.55	SW846	8260B	
Toluene	10.0	10.0	ug/L	100		SW846	8260B	
	10.0	10.1	ug/L	101	0.66	SW846	8260B	
Trichloroethene	10.0	10.6	ug/L	106		SW846	8260B	
	10.0	10.8	ug/L	108	1.4	SW846	8260B	
•								
			PERCENT	RECOVERY			•	
SURROGATE	_	. •	RECOVERY	LIMITS			•	
Dibromofluoromethane			99	(80 - 120)			
			99	(80 - 120)			
1,2-Dichloroethane-d4			99	(72 - 127)			
			98	(72 - 127)			
4-Bromofluorobenzene			95	(79 - 119)			
•			96	(79 - 119)			
Toluene-d8			100	(79 - 119)			
•			100	(79 - 119)			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D1K070130

MB Lot-Sample #: D1K150000-224

Work Order #...: EN1PQ1AA

Matrix....: WATER

and bumple if Direction 22

Prep Date....: 11/13/01
Prep Batch #...: 1319224

Analysis Time..: 13:54

Analysis Date..: 11/13/01

Dilution Factor: 1

REPORTING

PARAMETER Benzene	RESULT	LIMIT	UNITS	
Benzene		TTT1.1TT	OMITIO	METHOD
	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND .	1.0	ug/L	SW846 8260B
Bromoform	ND .	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B .
Chlorodibromomethane	- ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	.ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND ·	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #: D1K070130	Work Order	#: EN1PQ	1AA M	Matrix WATER
	•	REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
1,1,2,2-Tetrachloroethane	ND ·	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND .	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro- benzene	ND	1.0	. ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND ·	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	'ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
1,2-Dibromo-3- chloropropane (DBCP)	ND .	2.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B.
,	PERCENT	RECOVERY	ď	
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	101	(80 - 12	20)	•
1,2-Dichloroethane-d4	99	(72 - 12	27)	
4-Bromofluorobenzene	97	(79 - 1)	L9)	
Toluene-d8	, 102	(79 - 11	L9)	

NOTE (S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K070130 Work Order #...: ENF5H1AC-MS Matrix..... WATER

MS Lot-Sample #: D1K070130-001 ENF5H1AD-MSD

 Date Sampled...:
 11/06/01 07:30
 Date Received...:
 11/07/01

 Prep Date....:
 11/13/01
 Analysis Date...:
 11/13/01

 Prep Batch #...:
 1319224
 Analysis Time...:
 14:52

Dilution Factor: 1

*.	PERCENT	RECOVERY		RPD		
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOI	D
1,1-Dichloroethene	99	(79 - 119)			SW846	8260B
	101	(79 - 119)	1.1	(0-20)	SW846	8260B
Benzene	106	(79 - 119)			SW846	8260B
	104	(79 - 119)	1.5	(0-20)	SW846	8260B
Chlorobenzene	87	(76 - 116)			SW846	8260B
	88	(76 - 116)	0.89	(0-20)	SW846	8260B
Toluene	101	(75 - 122)			SW846	8260B
	102	(75 - 122)	0.87	(0-20)	SW846	8260B
Trichloroethene	110	(81 - 121)			SW846	8260B
	112	(81 - 121)	1.3	(0-20)	SW846	8260B
	•	PERCENT	r	RECOVERY		
SURROGATE	<u> </u>	RECOVERY	*	LIMITS		
Dibromofluoromethane		98		(80 - 120)	
		100		(80 - 120) :	
1,2-Dichloroethane-d4		101		(72 - 127)	
•		99		(72 - 127)	
4-Bromofluorobenzene		101		(79 - 119)	
		99		(79 - 119) ·	
Toluene-d8		99		(79 - 119)	•
		101		(79 - 119)	
						and the second s

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

PERCENT

Client Lot #...: D1K070130 Work Order #...: ENF5H1AC-MS Matrix..... WATER

MS Lot-Sample #: D1K070130-001 ENF5H1AD-MSD

SAMPLE SPIKE MEASRD

Date Sampled...: 11/06/01 07:30 Date Received..: 11/07/01
Prep Date....: 11/13/01 Analysis Date..: 11/13/01
Prep Batch #...: 1319224 Analysis Time..: 14:52

Dilution Factor: 1

PARAMETER	TUUOMA	TMA	TRUOMA	UNITS	RECOVERY	RPD	METHO		
1,1-Dichloroethene	ND	10.0	9.94	ug/L	99		SW846	8260B	
	ND	10.0	10.1	ug/L	101	1.1	SW846	8260B	
Benzene	ND	10.0	11.2	ug/L	106		SW846	8260B	
	ND	10.0	11.1	ug/L	104	1.5	SW846	8260B	
Chlorobenzene	ND	10.0	8.73	ug/L	¹ 87		SW846	8260B	
	ND	10.0	8.81	ug/L	88	0.89	SW846	8260B	V
Toluene	ND	10.0	10.1	ug/L	101		SW846	8260B	
	ND	10.0	10.2	ug/L	102	0.87	SW846	8260B	
Trichloroethene	4.3	10.0	15.3	ug/L	110		SW846	8260B	
	4.3	10.0	15.5	ug/L	112	1.3	SW846	8260B	
•									
		-	PERCENT	•	RECOVERY				
SURROGATE			RECOVER	Y	LIMITS				
Dibromofluoromethane			.98	-	(80 - 120				
			100		(80 - 120)			
1,2-Dichloroethane-d4			101		(72 - 12	7)			
			99	•	(72 - 12	7)			
4-Bromofluorobenzene	÷		101		(79 - 119	9)			
			99	•	(79 - 119	9)			
Toluene-d8			99		(79 - 119	9)			
			101		(79 - 119	9)			
	•				,	•			

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

NOTE(S):

HOLD TIME REPORT

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GCMS VOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif	Ext Hold	Ana Hold	Extraction Date	Analysis Date		Method Description
D1K070130001	SK-SW-1A	11/06/01 (07:30								
			8260B		7		14		11/13/01	14:31	VOA
D1K070130002	SK-SW-2A	11/06/01 0	7:50								
			8260B		7		14		11/13/01	16:38	VCA
D1K070130003	SK-SW-3A	11/06/01 0	8:10			•					
	,		8260B		7		14		11/13/01	16:59	AOV
D1K070130004	SK-SW-4A	11/06/01 0	8:30								
			8260B		7		14		11/13/01	17:20	VOA
D1K070130005	SK-SW-5A	11/06/01 0	8:50		,		-		• •	•	
•			8260B		7		14		11/13/01	17:41	VOA .
D1K070130006	SK-SW-5Z	11/06/01 0	8:55								i
			8260B		7		14		11/13/01	18:03	VOA ,
D1K070130007	TB-01	11/06/01 0	0:00								
		6	8260B	*	7		14		11/13/01	18:24	VOA

Chain of Custody Record

STL Denver 4955 Yarrow Street Arvada, CO 80002

SEVERN	
TRENT	
SERVICES	0

5-1°C 11/07
D-5.

Severn Trent Laboratories, Inc.

STL-4124 (0700) DEN (0900)						_	_							_				, ••		••••	•••	J116	Lubord	10110	, a, iiio.
Safety-Kleen (Wichida) Inc	Facilit	Projec KA	i Mana	ger 14	٧c	he.		Ca	M e	W	7-	Co	/e	L	c)			/6		/		Ch	ain of Custody	Number 59	
2549 North New York Ave	ave.	ره 3 ا	fone N - 9	lumb 33	iei (A	rea Co	ode)/F	ax Nı	umbe / 3 c	er 03 -	. 9.	3 A -	ء ح	5	20		Lab N	lumbe	r			Pi	age 2	o f	2
2549 North New York Ave City Wichita ISS 6	7219	Rus	sel	0	U M 1	2	La	b Cor	ntact	Yug	ler	<u> </u>		 -			lysis (. spac								
Project Name and Location (State) 5-K Wichita Farlity Wichi Contract/Purchase Order/Quote No		Carne	r.Wayi	bill Ñ	umbe	er							- 19	809									Specia	Llastru	otiona/
Contract/Purchase Order/Quote No	/			٨	1atrix	(laine serva			7	187		.							Condition		
Sample I D No. and Description (Containers for each sample may be combined on one line)	Date	Time	Ą,	Aqueous	Sec	Sort	Unores	H2SO4	HNOS	HCI	мэон	ZnAc/ NaOH		3 8										,	
· B-745	4/6/61	1345		X			1			X				X					7	\top	1		241	0. 7	TAT (X
B-740	11/6/01	1400		X						χ			1	X										1	
B-755	11/6/01	1435		X						X				X											
<u>B-750</u>	11/6/01	1445		X						Х				X									\		
		·						<u> </u>															Regul	or T	10
	ļ	ļ		_		_		L					\perp												
•			$\perp \downarrow$	_			<u> </u>	_	<u> </u>		_														
			1_1	_	_		_	<u> </u>	<u> </u>	<u> </u>				\perp							_	_			
70		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	_		_	_	_	<u> </u>	<u> </u>	Ļ		_				_		Ш	_	_		<u> </u>			
TB-01	1		-	즤	_	_	-	<u> </u>	<u> </u>	X		\perp	_/	X			_ _		\downarrow		_	_		\checkmark	
			-	\dashv	_		-	ļ	<u> </u>				_	_	-		_ _		_	_ _	_	<u> </u>			
Possible Hazard Identification		<u> </u>		unole	o Dis	posal	1	<u></u>	<u></u>			\perp									<u> </u>	1			
	Puison B	Unknow				To Clie	ent			sal E			□ A	rchiv	e For _		_ Moi	nths	(A le longe	may ar than	be as 3 mo	sesse onths)	ed if samples a	re retaine	ed .
Turn Around Time Required 24 Hours	ays 🗌 21 Day	ys 🗌 Oll	her					8	Req	uiren .//	ients K4.	(Spec	city) 40 Se	ch	r jm	med	istel	, h	/٧0	r611	re:	sil	4 by no	on 11	18/01
They of the Care of		Date //	6/6	- /	7111	6 : 3c	>	125	Recoi	yed l	J/	a,	,	4	Pin	v 61	<i>F-</i>	·····	•			<u>-</u>	fy by no Date 11/07/	7 Time	700
2 Relinquished By		Date			Tim			2 /	Rucei	ived E	∃γ .					1							Date	Time	
3 Relinquished By		Date			Tim	ie		3 F	Recei	ived l	Зу			_		····							Date	Time	
Comments					L														*			1			

Chain of Custody Record

STL Denver 4955 Yarrow Street Arvada, CO 80002

SEVERN	
TRENT	
SERVICES	•

5.1°C 11/07 D.5

Severn Trent Laboratories, Inc. **DEN (0900)** STL-4124 (0700) Project Manager Kay Tauscher (Cameron - Cala LLC)
Telephone Number (Area Code)/Fax Number Project Manager Safety-Kleen (Wichia), Inc. Facility Chain of Custody Number ///6/01 041160 2549 North NewYork Avenue
City State Zip Code 303-938-5535 /303-938-5520 Site Contact Analysis (Attach list if KS 67219 Wichita Kae Yoder more space is needed) Carner/Waybill Number S-K Wichita Facility Wichita KS
Contract/Purchase Order/Quote No Special Instructions/ Containers & Conditions of Receipt Matrix Preservatives Sample I.D. No. and Description Date Ŝ Time (Containers for each sample may be combined on one line) SK-SW-1A 11/6/01 07:30 Regular TAT SK-SW- 24 07:50 SK-SW-3A 08:10 SK-SW-4A 08:30 SK-SW-5A 08:50 SK-SW-52 08:55 _B-710 10:35 24 Hr TAT B-715 10:45 B-725 11/6/01 11:08 B-72 0 11/6/01 11:15 B-735 11/6/01 11:50 B-7312 11/6/01 12:15 Possible Hazard Identification Sample Disposal □ Non Hazard □ Flammable Skin lintant Poison B Unknown Return To Client (A lee may be assessed if samples are retained Disposal By Lab Archive For _____ ___ Months longer than 3 months) Turn Around Time Required Received By

Received By

Received By

Received By

Received By

Received By

Received By

Received By

Received By

Received By

Received By

Received By

Received By

Received By

Received By

Received By

Received By 24 Hours 48 Hours 7 Days 14 Days 21 Days Other 4:30 3 Relinquished By Date Time 3 Received By Time Comments



STL Denver

4955 Yarrow Street Arvada, CO 80002-4517

Tel: 303 736 0100 Fax: 303 431 7171 www.stl-inc.com

ANALYTICAL REPORT

SAFETY KLEEN (WICHITA, KS)

Lot #: D1K120175

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue, Suite 100 Boulder, CO 80301

SEVERN TRENT LABORATORIES, INC.

Kae E. Yoder Project Manager

December 5, 2001

This report shall not be reproduced except in full, without the written approval of the laboratory

The same of the sa

Severn Trent Laboratories, Inc.

Philadelphia, PA 19175-4305

Invoice

STL Denver .

4955 Yarrow Street

P.O. Box 7777 W4305

Arvada, CO 80002 (303) 421-6611

John Arbuthnot

Safety Kleen Inc

13351 Scenic Highway

Baton Rouge, LA 70807

Bill To:

Tet: Fax:

(303) 431-7171

SERVICES

28032937 05 DEC 01

Customer Number STL Project Number

D1K120175 00408171

Terms

NET 30 DAYS

Customer Contact

SAMPLE RECEIVING DATE : 11/10/01

REPORT DATE : 11/28/01

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue

Suite 100

Boulder, CO 80301

		, ,		
Line No. Oty	Matrix V. Code	Analysis Description	Unit Price	Extended Price
2	SOLID	SOLID, Percent Moisture, 160.3 Mod	8.00	16.00
2	SOLID	SOLID, Volatile Organics, 8260B	97.00	194.00
7	WATER	WATER, Volatile Organics, 8260B	97.00	679.00

NOTE: Applicable samples will be stored at no extra charge for a period of 30 days following the final report. Samples will be properly disposed of after 30 days, unless notified otherwise in writing.

Please reference Invoice number when remitting.

Customer P.O. Number / Contract Number / Reference

STL Project Manager Kae Yoder Salesperson Sub Total Tax

Total

DUPLICATE COPY

Table Of Contents

Standard Deliverables

Report Contents

Total Number of Pages

Standard Deliverables

The Cover Letter and the Report Cover page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.



- Table of Contents
- Case Narrative
- Executive Summary Detection Highlights
- Methods Summary
- Method/Analyst Summary
- Lot Sample Summary
- Analytical Results
- QC Data Association Summary
- Hold Time Report
- · Chain-of-Custody

CASE NARRATIVE

Client Name:

Safety-Kleen (Wichita)

Project Name: Project Number:

Sample Delivery Group:

D1K120175

Narrative Date:

12/05/01

Sample Receipt

Two solid samples, four water samples, one rinse blank and two trip blanks, submitted by Safety-Kleen (Wichita), Inc., were received by STL Denver on November 10, 2001, according to documented sample acceptance procedures. The samples were received intact at temperatures of 2.7°C, 4.5°C and 3.9°C. Analyses requested on the associated chains-of-custody are as follows: GC/MS Volatiles.

Discrepancies were noted between the analyses requested on the chains-of-custody and the analyses requested on the sample container labels. As instructed by the client on November 12, 2001, analyses were performed per the chain-of-custody. No other anomalies were encountered during sample receipt.

GC/MS Volatiles

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
B-47-3	Tetrachloroethene	540	25	
	Trichloroethene	26	25	ug/kg
B-47-14	! Tetrachloroethene	27		ug/kg
B-47-16	Chloroform			ug/kg
	Tetrachloroethene	13	2.5	ug/L
	1,1,1-Trichloroethane	71	2.5	ug/L
	Trichloroethene	23	2.5	ug/L
B-78-20		47 .	2.5	ug/L
	1,1-Dichloroethane	26 .	5.0	ug/L
	cis-1,2-Dichloroethene	70 i	5.0	ug/L
	Tetrachloroethene	160	5.0	ug/L
	Trichloroethene	28	5.0	ug/L
	Vinyl chloride	260	5.0	ug/L
B-60-18	1,1-Dichloroethane	45	10	ug/L
	Ethylbenzene	77	10	
	1,2,4-Trimethylbenzene	22	10	ug/L
	o-Xylene	290	10	ug/L
	m-Xylene & p-Xylene	590	20	ug/L
3-82-18	1,1-Dichloroethane	6.8		ug/L
	cis-1,2-Dichloroethene		1.0	ug/L
	Tetrachloroethene	4.3	1.0	ug/L
·	Trichloroethene	15	1.0	ug/L
	, Themoreculene	7.1	1.0	ug/L

- > The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Samples B-47-16, B-78-20, and B-82-18 were received at the laboratory with a pH value >2.0. For samples analyzed within the normal 14 day holding time, experimental evidence suggests that some aromatic compounds in wastewater samples, notably benzene, toluene, and ethylbenzene are susceptible to biological degradation if samples are not preserved to a pH of 2.0.

> Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. In some cases, due to analytes present above the linear calibration curve, samples had to be analyzed at a dilution. For samples analyzed at a dilution, the reporting limits have been adjusted relative to the dilution required. The following table details the associated dilutions.

Sample ID	Dilution
B-47-3	1:15
B-47-16	1:2.5
B-78-20	1:5
B-60-18	1:10

- > For sample B-47-3, surrogate Dibromofluoromethane was recovered at 123%, which is outside the QC control limit range of 80-120. Because the sample was analyzed at a dilution, and the raw data shows clear evidence of matrix interference, corrective action is deemed unnecessary.
- > Standard batch MS/MSD has been provided. All spike parameters were within QC control limits with the exception of the items noted in the following table. The acceptable LCS/LCSD analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

Parameter	QC Batch/	MS	MSD	Recovery		RPD
	Specific Sample	%Rec	%Rec	Limits	RPD	Limits
Trichloroethene	QC Batch 1325275	<u>i</u> 88	77	81-121	3.0	0-20

These data and reporting limits are being used specifically to meet the needs of this project. All RLs are supported by STL Denver's Method Detection Limits (MDLs). Reporting limits in this report are at or above the MDL.

I certify that the data presented in this report are accurate, complete, and meets the minimum quality assurance standards in 40-CFR 136. 40-CFR 141, and/or SW846. The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. An assessment of the quality of the data, noting any exceptions, outliers, and/or problems encountered have been narrated herein.

Project Manager

EXECUTIVE SUMMARY - Detection Highlights

D1K120175

			REPORTING		ANALYTICAL
	PARAMETER	RESULT	LIMIT	UNITS	METHOD
B-47-3	3 11/08/01 11:00 001				
	Tetrachloroethene	540	25	ug/kg	SW846 8260B
	Trichloroethene	26	25	ug/kg	SW846 8260B
	Percent Moisture	14.9	0.10	%	MCAWW 160.3 MOD
B-47-1	4 11/08/01 11:15 002				
	Tetrachloroethene	37	5.0	ug/kg	SW846 8260B
	Percent Moisture	17.6	0.10	%	MCAWW 160.3 MOD
B-47-1	6 11/08/01 11:20 003				
	Chloroform	13	2.5	ug/L	SW846 8260B
	Tetrachloroethene	71	2.5	ug/L	SW846 8260B
	1,1,1-Trichloroethane	23	2.5	ug/L	SW846 8260B
	Trichloroethene	47	2.5	ug/L	SW846 8260B
B-78-2	0 11/08/01 12:00 004			-	
	1,1-Dichloroethane	26	5.0	/T	CHO46 0260D
	cis-1,2-Dichloroethene	70	5.0	ug/L ug/L	SW846 8260B
	Tetrachloroethene	160	5.0	ug/L ug/L	SW846 8260B SW846 8260B
	Trichloroethene	28	5.0	ug/L ug/L	SW846 8260B
	Vinyl chloride	260	5.0	ug/L	SW846 8260B
B-60-1	8 11/09/01 12:25 008				
	1,1-Dichloroethane	4.5	1.0	1-	
	Ethylbenzene	45	10	ug/L	SW846 8260B
	1,2,4-Trimethylbenzene	77 23	10	ug/L	SW846 8260B
	o-Xylene	23 290	10	ug/L	SW846 8260B
	m-Xylene & p-Xylene	590 590	10 20	ug/L	SW846 8260B
	m Nytone u p Nytone	390	20	ug/L	SW846 8260B
B-82-1	8 11/09/01 12:45 009				
	1,1-Dichloroethane	6.8	1.0	ug/L	SW846 8260B
	cis-1,2-Dichloroethene	4.3	1.0	ug/L	SW846 8260B
	Tetrachloroethene	15	1.0	ug/L	SW846 8260B
	Trichloroethene	7.1	1.0	ug/L	SW846 8260B

METHODS SUMMARY

D1K120175

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

D1K120175

ANALYTIC METHOD	AL	ANALYST	ANALYST ID			
MCAWW 16	0.3 MOD	Nathan Lovstad	000090			
SW846 82	60B	Dan Appelhans	001008			
SW846 82	60B	Mike Armstrong	002544			
Referenc	es:					
MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.						
SW846		valuating Solid Waste, Physical/C tion, November 1986 and its updat				

SAMPLE SUMMARY

D1K120175

₩O #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
,				
ENRH0	. 001	B-47-3	11/08/01	11:00
ENRH9	002	B-47-14	11/08/01	11:15
ENRJA	003	B-47-16	11/08/01	11:20
ENRJC	004	B-78-20	11/08/01	12:00
ENRJE	005	RB-118	11/08/01	12:30
ENRJF	006	TB-02	11/09/01	
ENRJM	007	TB-03	11/09/01	
ENRJP	800	B-60-18	11/09/01	12:25
ENRJQ	009	B-82-18	11/09/01	

NOTE (S):

⁻ The analytical results of the samples listed above are presented on the following pages.

⁻ All calculations are performed before rounding to avoid round-off errors in calculated results.

⁻ Results noted as "ND" were not detected at or above the stated limit.

⁻ This report must not be reproduced, except in full, without the written approval of the laboratory.

⁻ Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Client Sample ID: B-47-3

GC/MS Volatiles

Lot-Sample #...: D1K120175-001 Work Order #...: ENRH01AA Matrix...... SOLID

 Date Sampled...:
 11/08/01
 11:00
 Date Received...:
 11/10/01

 Prep Date.....:
 11/21/01
 Analysis Date...:
 11/21/01

 Prep Batch #...:
 1330507
 Analysis Time...:
 11:55

Dilution Factor: 5

% Moisture....: 15 **Method.....:** SW846 8260B

•		REPORTING	G	
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	25	ug/kg	
Bromobenzene	ND	25	ug/kg	
Bromochloromethane	ND	25	ug/kg	
Bromodichloromethane	ND	25	ug/kg	
Bromoform	ND	25	ug/kg	
Bromomethane	ND	50	ug/kg	
n-Butylbenzene	ND	25	ug/kg	
sec-Butylbenzene	ND	25 1	ug/kg	
tert-Butylbenzene	ND	25	ug/kg	
Carbon tetrachloride	ND	25	ug/kg	
Chlorobenzene	ND	25	ug/kg	
Chlorodibromomethane	ND	25	ug/kg	
Chloroethane	ND	50	ug/kg	
Chloroform	ND	50	ug/kg	
Chloromethane	ND	50	ug/kg	
2-Chlorotoluene	ND	25	ug/kg	
4-Chlorotoluene	ND	-25	ug/kg	
1,2-Dibromo-3-	ND	50	ug/kg	
chloropropane (DBCP)			چ-٠٠٠	
1,2-Dibromoethane (EDB)	ND	25	ug/kg	
Dibromomethane	ND	25	ug/kg	
1,2-Dichlorobenzene	ND	25	ug/kg	
1,3-Dichlorobenzene	ND	25	ug/kg	
1,4-Dichlorobenzene	ND	25	ug/kg	
Dichlorodifluoromethane	ND	50	ug/kg	
1,1-Dichloroethane	ND	25	ug/kg	
1,2-Dichloroethane	ND `	25	ug/kg	
cis-1,2-Dichloroethene	ND	12	ug/kg	
trans-1,2-Dichloroethene	ND	12	ug/kg	
1,1-Dichloroethene	ND	25	ug/kg	
1,2-Dichloropropane	ND	25	ug/kg	•
1,3-Dichloropropane	ND .	25	ug/kg	
2,2-Dichloropropane	ND	25	ug/kg	
1,1-Dichloropropene	ND	25	ug/kg	
Ethylbenzene	ND	25	ug/kg	
Hexachlorobutadiene	ND	25	ug/kg	
Isopropylbenzene	ND	25	ug/kg	
p-Isopropyltoluene	ND	25	ug/kg	
•				

Client Sample ID: B-47-3

GC/MS Volatiles

Lot-Sample #: D1K120175-001	Work Order #:	ENRH01AA	Matrix SOLID
•		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	25	ug/kg
Naphthalene	ND .	25	ug/kg
n-Propylbenzene	ND	25	ug/kg .
Styrene	ND	25	ug/kg
1,1,1,2-Tetrachloroethane	ND	25	ug/kg
1,1,2,2-Tetrachloroethane	ND	25	ug/kg
Tetrachloroethene	540	25	ug/kg
Toluene	ND	25	ug/kg
1,2,3-Trichlorobenzene.	ND ·	25	ug/kg
1,2,4-Trichloro-	ND .	25	ug/kg
benzene			
1,1,1-Trichloroethane	ND	25	ug/kg
1,1,2-Trichloroethane	ND	25	ug/kg
Trichloroethene	26	25	ug/kg
Trichlorofluoromethane	ND	50	ug/kg
1,2,3-Trichloropropane	ND	25	ug/kg
1,2,4-Trimethylbenzene	ND	25	ug/kg
1,3,5-Trimethylbenzene	ND	25	ug/kg
Vinyl chloride	ND	25	ug/kg
m-Xylene & p-Xylene	ND	12	ug/kg
o-Xylene	ND	12	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	123 *	(80 - 120)	
1,2-Dichloroethane-d4	112 .	(79 - 125)	•
4-Bromofluorobenzene	129	(71 - 132)	
Toluene-d8	107	(77 - 117)	•

^{*} Surrogate recovery is outside stated control limits.

NOTE(S):

Client Sample ID: B-47-14

GC/MS Volatiles

Lot-Sample #...: D1K120175-002 Work Order #...: ENRH91AA Matrix...... SOLID

Date Sampled...: 11/08/01 11:15 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 18:45

Dilution Factor: 1

% Moisture....: 18 Method.....: SW846 8260B

	•	REPORTIN	r G
PARAMETER	RESULT	LIMIT	UNITS
Chloroform	ND	10	ug/kg
Chloromethane	ND ·	10	ug/kg
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg `
Bromoform	ND -	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)		•	
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND .	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-47-14

GC/MS Volatiles

TOC-Squibte #:	DIK1201/3-002	WOLK OLDER #: ENRHYLAA	matrix SOLID
	•		
		*	

•		DEPODETIC		
PARAMETER	RESULT	REPORTING LIMIT	UNITS	
Methylene chloride	ND ND	5.0	ug/kg	
Naphthalene	ND	5.0	ug/kg	
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND	5.0	ug/kg	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
Tetrachloroethene	37	5.0	ug/kg	
Toluene	ND	5.0	ug/kg	
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
1,2,4-Trichloro-	ND	5.0	ug/kg	
benzene			-571-5	
1,1,1-Trichloroethane	ND	5.0	ug/kg	
1,1,2-Trichloroethane	ND	5.0	ug/kg	
Trichloroethene	ND	5.0	ug/kg	
Trichlorofluoromethane	ND	10	ug/kg	
1,2,3-Trichloropropane	ND	5.0	ug/kg	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
Vinyl chloride	ND	5.0	ug/kg	
m-Xylene & p-Xylene	ND	2.5	ug/kg	
o-Xylene	ND	2.5	ug/kg	
	*			
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	104	(80 - 120)	•	
1,2-Dichloroethane-d4	108	(79 - 125)		
4-Bromofluorobenzene	103	(71 - 132)		
Toluene-d8	92	(77 - 117)		

Client Sample ID: B-47-16

GC/MS Volatiles

Lot-Sample #...: D1K120175-003 Work Order #...: ENRJA1AA Matrix...... WATER

Date Sampled...: 11/08/01 11:20 Date Received..: 11/10/01
Prep Date....: 11/19/01 Analysis Date..: 11/19/01
Prep Batch #...: 1324476 Analysis Time..: 14:55

Dilution Factor: 2.5

Method.....: SW846 8260B

REPORTING PARAMETER RESULT LIMIT UNITS Benzene ug/L ND 2.5 ND Bromobenzene 2.5 ug/L Bromochloromethane ND 2.5 uq/L Bromodichloromethane ND 2.5 ug/L Bromoform ND 4 2.5 uq/L Bromomethane ND 5.0 ug/L n-Butylbenzene ND 2.5 ug/L sec-Butylbenzene ND 2.5 uq/L tert-Butylbenzene ND 2.5 ug/L Carbon tetrachloride ND 2.5 ug/L Chlorobenzene ND 2.5 ug/L Chlorodibromomethane ND 2.5 ug/L Chloroethane ND 5.0 ug/L Chloroform 13 2.5 uq/L Chloromethane ND 5.0 ug/L 2-Chlorotoluene ND 2.5 uq/L 4-Chlorotoluene ND 2.5 ug/L Dibromomethane ND 2.5 ug/L 1,2-Dichlorobenzene ND 2.5 ug/L 1,3-Dichlorobenzene ND 2.5 uq/L 1,4-Dichlorobenzene ND 2.5 uq/L Dichlorodifluoromethane ND 5.0 uq/L 1,1-Dichloroethane ND 2.5 ug/L 1,2-Dichloroethane ND 2.5 uq/L 1,1-Dichloroethene ND 2.5 ug/L cis-1,2-Dichloroethene ND 2.5 ug/L trans-1,2-Dichloroethene ND 1.2 ug/L 1,2-Dichloropropane ND 2.5 ug/L 1,3-Dichloropropane ND 2.5 ug/L 2,2-Dichloropropane ND 12 ug/L 1,1-Dichloropropene ND 2.5 uq/L Ethylbenzene ND 2.5 uq/L Trichlorofluoromethane ND 5.0 ug/L Hexachlorobutadiene ND 2.5 ug/L Isopropylbenzene ND 2.5 ug/L p-Isopropyltoluene ND 2.5 ug/L Methylene chloride ND 2.5 ug/L Naphthalene ND 2.5 ug/L

Client Sample ID: B-47-16

GC/MS Volatiles

Lot-Sample #: D1K120175-003	Work Order #	: ENRJA1AA	Matrix WATER
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	2.5	ug/L
Styrene	ND	2.5	ug/L
1,1,1,2-Tetrachloroethane	ND	2.5	ug/L
1,1,2,2-Tetrachloroethane	ND .	2.5	ug/L
Tetrachloroethene	71	2.5	ug/L
Toluene	ND	2.5	ug/L
1,2,3-Trichlorobenzene	ND	2.5	ug/L
1,2,4-Trichloro-	ND	2.5	ug/L
benzene			
1,1,1-Trichloroethane	23	2.5	ug/L
1,1,2-Trichloroethane	ND	2.5	ug/L
Trichloroethene	47	2.5	ug/L
1,2,3-Trichloropropane	ND .	2.5	ug/L
1,2,4-Trimethylbenzene	ND	2.5	ug/L
1,3,5-Trimethylbenzene	ND	2.5	ug/L
Vinyl chloride	ND	2.5	ug/L
o-Xylene	ND	2.5	ug/L
m-Xylene & p-Xylene	ND	5.0	ug/L
1,2-Dibromo-3-	ND	5.0	ug/L
chloropropane (DBCP)			. .
1,2-Dibromoethane (EDB)	ND	2.5	ug/L
	i .		
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	103	(80 - 120)	
1,2-Dichloroethane-d4	101	(72 - 127)	
4-Bromofluorobenzene	101	(79 - 119)	

(79 - 119)

103

Toluene-d8

Client Sample ID: B-78-20

GC/MS Volatiles

Lot-Sample #...: D1K120175-004 Work Order #...: ENRJC1AA Matrix...... WATER

Date Sampled...: 11/08/01 12:00 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324476 Analysis Time..: 15:20

Dilution Factor: 5

Method..... SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	10	ug/L
n-Butylbenzene -	ND	5.0	ug/L .
sec-Butylbenzene	ND	5.0	ug/L
tert-Butylbenzene	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Chlorodibromomethane	ND	5.0	ug/L
Chloroethane	ND	10	ug/L
Chloroform	ND	5.0	ug/L
Chloromethane	ND	10	ug/L
2-Chlorotoluene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
1,2-Dichlorobenzene	ND ·	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
Dichlorodifluoromethane	, ND	10	ug/L
1,1-Dichloroethane	26	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
cis-1,2-Dichloroethene	70	5.0	ug/L
trans-1,2-Dichloroethene	ND	2.5	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
1,3-Dichloropropane	ND	5.0	ug/L
2,2-Dichloropropane	ND	25	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Trichlorofluoromethane	ND	10	ug/L
Hexachlorobutadiene	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
p-Isopropyltoluene	ND	5.0	ug/L
Methylene chloride	ND	5.0 .	ug/L
Naphthalene	ND	5.0	ug/L

Client Sample ID: B-78-20

GC/MS Volatiles

Lot-Sample #: D1K120175-004	Work Order #:	: ENRJC1AA	Matrix: WATER
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND ,	5.0 .	ug/L
Tetrachloroethene	160	5.0	ug/L
Toluene	ND	5.0	ug/L
1,2,3-Trichlorobenzene	ND	5.0	ug/L
1,2,4-Trichloro-	ND	5.0	ug/L
benzene		•	
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
Trichloroethene	28	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
Vinyl chloride	260	5.0	ug/L
o-Xylene	ND	5.0	ug/L
m-Xylene & p-Xylene	ND	10	ug/L
1,2-Dibromo-3-	ND,	10 .	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	103	(80 - 120)	
1,2-Dichloroethane-d4	101	(72 - 127)	
4-Bromofluorobenzene	102	(79 - 119)	
Toluene-d8	104	(79 - 119)	

Client Sample ID: RB-118

GC/MS Volatiles

Lot-Sample #...: D1K120175-005 Work Order #...: ENRJE1AA Matrix...... WATER

Date Sampled...: 11/08/01 12:30 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324476 Analysis Time..: 15:44

Dilution Factor: 1

Method..... SW846 8260B

		REPORTII	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND .	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND ,	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: RB-118

GC/MS Volatiles

Lot-Sample #: D1K120175-005	Work Order #: ENRJE	LAA Matrix WATER
-----------------------------	---------------------	------------------

		REPORTING	•
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L`
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND _	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene		•	
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND ·	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND ,	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)		•	J. –
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	103	(80 - 120)	
1,2-Dichloroethane-d4	103	(72 - 127)	*
4-Bromofluorobenzene ·	105	(79 - 119)	
Toluene-d8	105	(79 - 119)	

Client Sample ID: TB-02

GC/MS Volatiles

Lot-Sample #...: D1K120175-006 Work Order #...: ENRJF1AA Matrix..... WATER

 Date Sampled...: 11/09/01
 Date Received..: 11/10/01

 Prep Date....: 11/19/01
 Analysis Date..: 11/19/01

 Prep Batch #...: 1324476
 Analysis Time..: 16:09

Dilution Factor: 1

Method.....: SW846 8260B

	,	REPORTING	•
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform .	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	.ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L .
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/Ĺ
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/Ľ
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND .	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND .	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: TB-02

GC/MS Volatiles

Lot-Sample #: D1K120175-006	Work Order #: ENRJF1AA	Matrix WATER
-----------------------------	------------------------	--------------

4			·		
		REPORTING	REPORTING		
PARAMETER	RESULT	LIMIT	UNITS		
n-Propylbenzene	ND	1.0	ug/L		
Styrene	ND	1.0	ug/L		
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L		
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L		
Tetrachloroethene	ND	1.0	ug/L		
Toluene	ND	1.0	ug/L		
1,2,3-Trichlorobenzene	ND	1.0	ug/L	•	
1,2,4-Trichloro-	ND	1.0	ug/L		
benzene					
1,1,1-Trichloroethane	ND	1.0	ug/L		
1,1,2-Trichloroethane	ND	1.0	ug/L		
Trichloroethene	ND	1.0	ug/L		
1,2,3-Trichloropropane	ND	1.0	ug/L		
1,2,4-Trimethylbenzene	ND	1.0	ug/L		
1,3,5-Trimethylbenzene	ND	1.0	ug/L		
Vinyl chloride	ND	1.0	ug/L		
o-Xylene	ND	1.0	ug/L		
m-Xylene & p-Xylene	ND	2.0	ug/L		
1,2-Dibromo-3-	ND	2.0	ug/L		
chloropropane (DBCP)	•		-37 -		
1,2-Dibromoethane (EDB)	ND	1.0	ug/L		
			. 3, –		
	PERCENT	. RECOVERY			
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	103	(80 - 120)	-		
1,2-Dichloroethane-d4	102	(72 - 127)			
4-Bromofluorobenzene	103	(79 - 119)			
Toluene-d8	105	(79 - 119)			

Client Sample ID: TB-03

GC/MS Volatiles

Lot-Sample #...: D1K120175-007 Work Order #...: ENRJM1AA Matrix..... WATER

Date Sampled...: 11/09/01 Date Received..: 11/10/01
Prep Date....: 11/19/01 Analysis Date..: 11/19/01
Prep Batch #...: 1324476 Analysis Time..: 16:34

Dilution Factor: 1

Method..... SW846 8260B

	•	REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND ,	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND .	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L.
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

Client Sample ID: TB-03

GC/MS Volatiles

Lot-Sample #: D1K120175-007	Work Order	ENRJM1AA	Matrix:	WATER
-----------------------------	------------	----------	---------	-------

· · · · · · · · · · · · · · · · · · ·		REPORTING				
PARAMETER	RESULT	LIMIT	UNITS			
n-Propylbenzene	ND	1.0	ug/L			
Styrene	ND	1.0	ug/L			
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L			
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L			
Tetrachloroethene	ND	1.0	ug/L			
Toluene	ND	1.0	ug/L		*	
1,2,3-Trichlorobenzene	ND	1.0	ug/L			
1,2,4-Trichloro-	ND	1.0	ug/L			
benzene			- 3 , –			
1,1,1-Trichloroethane ·	ND	1.0	ug/L	•		
1,1,2-Trichloroethane	ND	1.0	ug/L			
Trichloroethene	ND	1.0	ug/L			
1,2,3-Trichloropropane	ND	1.0	ug/L			
1,2,4-Trimethylbenzene	ND	1.0	ug/L		* *	
1,3,5-Trimethylbenzene	ND	1.0	ug/L			
Vinyl chloride	ND	1.0	ug/L			
o-Xylene	ND	1.0	ug/L			
m-Xylene & p-Xylene	ND	2.0	ug/L			
1,2-Dibromo-3-	ND	2.0	ug/L			
chloropropane (DBCP)			٥,			
1,2-Dibromoethane (EDB)	ND	1.0	ug/L			
	PERCENT	RECOVERY				* .
SURROGATE	RECOVERY	LIMITS				
Dibromofluoromethane	104	(80 - 120)				
1,2-Dichloroethane-d4	102	(72 - 127)				
4-Bromofluorobenzene	104	(79 - 119)				, ,
Toluene-d8	106	(79 - 119)				

Client Sample ID: B-60-18

GC/MS Volatiles

Lot-Sample #...: D1K120175-008 Work Order #...: ENRJP1AA Matrix..... WATER

Date Sampled...: 11/09/01 12:25 Date Received..: 11/10/01 Prep Date.....: 11/20/01 Analysis Date...: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 16:18

Dilution Factor: 10

Method....: SW846 8260B

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	10	ug/L	
Bromobenzene	ND	10	ug/L	
Bromochloromethane	ND	10	ug/L	
Bromodichloromethane	ND	10	ug/L '	
Bromoform	ND	10	ug/L'	
Bromomethane .	ND	20	ug/L	
n-Butylbenzene	ND	10	ug/L	
sec-Butylbenzene	ND	10	ug/L	
tert-Butylbenzene	ND	10	ug/L	
Carbon tetrachloride	ND	10	ug/L	
Chlorobenzene	ND	10	ug/L	
Chlorodibromomethane	ND	10	ug/L	
Chloroethane	ND	20	ug/L	
Chloroform	ND	10	ug/L	
Chloromethane	ND	20	ug/L	
2-Chlorotoluene	ND	10	ug/L	
4-Chlorotoluene	ND	10	ug/L	
Dibromomethane	ND	10	ug/L	
1,2-Dichlorobenzene	ND	10	ug/L	
1,3-Dichlorobenzene	ND	10	ug/L	
1,4-Dichlorobenzene	ND	10	ug/L	
Dichlorodifluoromethane	ND	20	ug/L	
1,1-Dichloroethane	45	10	ug/L	
1,2-Dichloroethane	ND	10	ug/L	
1,1-Dichloroethene	ND	10	ug/L	
cis-1,2-Dichloroethene	ND	10	ug/L	
trans-1,2-Dichloroethene	ND .	5.0	ug/L	
1,2-Dichloropropane	ND	10	ug/L	
1,3-Dichloropropane	ND	10	ug/L	
2,2-Dichloropropane	ND ·	50	ug/L	
1,1-Dichloropropene	ND	10	ug/L	
Ethylbenzene	77	10	ug/L	
Trichlorofluoromethane	ND	20	ug/L	
Hexachlorobutadiene	ND	10	ug/L	
Isopropylbenzene	ND ·	10	ug/L	
p-Isopropyltoluene	ND	10	ug/L	
Methylene chloride	ND	10	ug/L	
Naphthalene .	ND	10	ug/L	

(Continued on next page)

Client Sample ID: B-60-18

GC/MS Volatiles

Lot-Sample #: D1K120175-008	work orde	er #:	ENRUPIAA	matrix	: WATER
				,	

	· ·	REPORTING	
PARAMETER	RESULT	LIMIT	UNITS .
n-Propylbenzene	ND	10	ug/L
Styrene	ND	10	ug/L
1,1,1,2-Tetrachloroethane	ND	10	ug/L
1,1,2,2-Tetrachloroethane	ND	10	ug/L
Tetrachloroethene	ND	10	ug/L
Toluene	ND	10	ug/L
1,2,3-Trichlorobenzene	ND	10	ug/L
1,2,4-Trichloro-	ND	10	ug/L
benzene			
1,1,1-Trichloroethane	ND .	10	ug/L
1,1,2-Trichloroethane	ND	10	ug/L
Trichloroethene	ND	10	ug/L
1,2,3-Trichloropropane	ND	10	ug/L
1,2,4-Trimethylbenzene	23	10	ug/L
1,3,5-Trimethylbenzene	ND .	10	ug/L
Vinyl chloride	ND	10	ug/L
o-Xylene	290	10	ug/L
m-Xylene & p-Xylene	590	20	ug/L
1,2-Dibromo-3-	ND	20	ug/L
chloropropane (DBCP)	•		
1,2-Dibromoethane (EDB)	ND	10	ug/L .
	PERCENT	RECOVERY	•
SURROGATE	RECOVERY	LIMITS	_
Dibromofluoromethane	106	(80 - 120)	
1,2-Dichloroethane-d4	110	(72 - 127)	
4-Bromofluorobenzene	92	(79 - 119)	
Toluene-d8	112	(79 - 119)	

Client Sample ID: B-82-18

GC/MS Volatiles

Lot-Sample #...: D1K120175-009 Work Order #...: ENRJQ1AA Matrix...... WATER

 Date Sampled...:
 11/09/01
 12:45
 Date Received...:
 11/10/01

 Prep Date....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324476
 Analysis Time...:
 17:23

Dilution Factor: 1

Method..... SW846 8260B

PARMETER RESULT LIMIT UNITS			REPORTING		
Bromobenzene	PARAMETER	RESULT	LIMIT	UNITS	
Bromochloromethane	Benzene	ND	1.0	ug/L	
Bromodichloromethane	Bromobenzene	ND	1.0	ug/L	
Bromoform	Bromochloromethane	ND	1.0	ug/L	
Bromomethane	Bromodichloromethane	ND	1.0	ug/L	
ND	Bromoform	ND	1.0	ug/L	
sec-Butylbenzene ND 1.0 ug/L tert-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chlorotane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chlorotoluene ND 1.0 ug/L Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,2-Dichloropropane ND	Bromomethane	ND	2.0	ug/L	
tert-Butylbenzene ND 1.0 ug/L Carbon tetrachloride ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chlorotchane ND 1.0 ug/L Chloroform ND 1.0 ug/L Chlorotchuene ND 1.0 ug/L 2-Chlorotchuene ND 1.0 ug/L 4-Chlorotchuene ND 1.0 ug/L 4-Chlorotchuene ND 1.0 ug/L 4-Chlorotchuene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND<	n-Butylbenzene	ND ,	1.0	ug/L	
Carbon tetrachloride ND 1.0 ug/L Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chlorothane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 2.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane 6.8 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND <td></td> <td>ND</td> <td>1.0</td> <td>ug/L</td>		ND	1.0	ug/L	
Chlorobenzene ND 1.0 ug/L Chlorodibromomethane ND 1.0 ug/L Chlorothane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chloroform ND 1.0 ug/L Chloroform ND 1.0 ug/L Chlorothane ND 1.0 ug/L Chlorothane ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 1.0 ug/L Dibromomethane ND 1.0 ug/L 1.2-Dichlorobenzene ND 1.0 ug/L 1.3-Dichlorobenzene ND 1.0 ug/L 1.4-Dichlorobenzene ND 1.0 ug/L 1.4-Dichlorothane ND 2.0 ug/L 1.1-Dichloroethane ND 2.0 ug/L 1.1-Dichloroethane ND 1.0 ug/L 1.1-Dichloroethene ND 1.0 ug/L 1.1-Dichloroethene ND 1.0 ug/L 1.1-Dichloroethene ND 1.0 ug/L 1.1-Dichloroethene ND 1.0 ug/L 1.1-Dichloroethene ND 1.0 ug/L 1.2-Dichloroethene ND 1.0 ug/L 1.3-Dichloropropane ND 1.0 ug/L	tert-Butylbenzene	ND	1.0	ug/L	
Chlorodibromomethane ND 1.0 ug/L Chloroethane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 2.0 ug/L Chloromethane ND 2.0 ug/L Chloromethane ND 2.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorothane ND 2.0 ug/L 1,1-Dichloroethane ND 2.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloropopane ND 1.0 ug/L 1,2-Dichloropopane ND 1.0 ug/L 1,2-Dichloropopane ND 1.0 ug/L 1,2-Dichloropopane ND 1.0 ug/L 1,1-Dichloropopane ND 1,1-Dichlorop	Carbon tetrachloride	ND	1.0	ug/L	
Chloroethane ND 2.0 ug/L Chloroform ND 1.0 ug/L Chloromethane ND 2.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND </td <td>Chlorobenzene</td> <td>ND</td> <td>1.0</td> <td>ug/L</td>	Chlorobenzene	ND	1.0	ug/L	
Chloroform ND 1.0 ug/L Chloromethane ND 2.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 2.0 ug/L 1,1-Dichloroethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L	Chlorodibromomethane	ND	1.0	ug/L	
Chloromethane ND 2.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 2.0 ug/L 1,1-Dichloroethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L	Chloroethane	ND	2.0	ug/L	
Chloromethane ND 2.0 ug/L 2-Chlorotoluene ND 1.0 ug/L 4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L Ethylbenzene	Chloroform	ND	1.0	ug/L	
4-Chlorotoluene ND 1.0 ug/L Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Trichloro	Chloromethane	ND	2.0	_	
Dibromomethane ND 1.0 ug/L 1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene MD 1.0 ug/L 1,1-Dichloroethene ND 0.50 ug/L trans-1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Ts		ND	1.0	ug/L	
1,2-Dichlorobenzene ND 1.0 ug/L 1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 0.50 ug/L 1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloroprop	4-Chlorotoluene	ND	1.0	ug/L	
1,3-Dichlorobenzene ND 1.0 ug/L 1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane ND 1.0 ug/L 1,2-Dichloroethene ND 1.0 ug/L 1,1-Dichloroethene ND 0.50 ug/L trans-1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichl	· · · ·	ND	1.0	ug/L	
1,4-Dichlorobenzene ND 1.0 ug/L Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane 6.8 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L cis-1,2-Dichloroethene ND 0.50 ug/L trans-1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L P-Isopropyltoluene ND 1.0 ug/L Methylene c	1,2-Dichlorobenzene	ND	1.0	ug/L	
Dichlorodifluoromethane ND 2.0 ug/L 1,1-Dichloroethane 6.8 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L cis-1,2-Dichloroethene ND 0.50 ug/L trans-1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L	·	ND	1.0	_	
1,1-Dichloroethane 6.8 1.0 ug/L 1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L cis-1,2-Dichloroethene ND 0.50 ug/L trans-1,2-Dichloroethene ND 1.0 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 1.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L P-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		ND	1.0	ug/L *	
1,2-Dichloroethane ND 1.0 ug/L 1,1-Dichloroethene ND 1.0 ug/L cis-1,2-Dichloroethene 4.3 1.0 ug/L trans-1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L P-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		ND	2.0	ug/L	
1,1-Dichloroethene ND 1.0 ug/L cis-1,2-Dichloroethene 4.3 1.0 ug/L trans-1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 1.0 ug/L 1,1-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		6.8	1.0	ug/L	
cis-1,2-Dichloroethene4.31.0ug/Ltrans-1,2-DichloroetheneND0.50ug/L1,2-DichloropropaneND1.0ug/L1,3-DichloropropaneND1.0ug/L2,2-DichloropropaneND5.0ug/L1,1-DichloropropeneND1.0ug/LEthylbenzeneND1.0ug/LTrichlorofluoromethaneND2.0ug/LHexachlorobutadieneND1.0ug/LIsopropylbenzeneND1.0ug/Lp-IsopropyltolueneND1.0ug/LMethylene chlorideND1.0ug/L		ND	1.0	ug/L	
trans-1,2-Dichloroethene ND 0.50 ug/L 1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	1,1-Dichloroethene	ND	1.0	ug/L	
1,2-Dichloropropane ND 1.0 ug/L 1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L P-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		4.3	1.0	ug/L	
1,3-Dichloropropane ND 1.0 ug/L 2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L P-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		ND	0.50	ug/L	
2,2-Dichloropropane ND 5.0 ug/L 1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L			1.0	ug/L	
1,1-Dichloropropene ND 1.0 ug/L Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		ND	1.0	ug/L	
Ethylbenzene ND 1.0 ug/L Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	- -	ND	5.0	ug/L	
Trichlorofluoromethane ND 2.0 ug/L Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	- -	ND	1.0	ug/L	
Hexachlorobutadiene ND 1.0 ug/L Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		ND	1.0	ug/L	
Isopropylbenzene ND 1.0 ug/L p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L	Trichlorofluoromethane	ND	2.0	ug/L	
p-Isopropyltoluene ND 1.0 ug/L Methylene chloride ND 1.0 ug/L		ND	1.0	ug/L	
Methylene chloride ND 1.0 ug/L		ND	1.0	ug/L	
		ND	1.0	ug/L	
Nanhthalana		ND	1.0	ug/L	
Naphthalene ND 1.0 ug/L	Naphthalene	ND	1.0	ug/L	

(Continued on next page)

Client Sample ID: B-82-18

GC/MS Volatiles

Lot-Sample #: D1K120175-009	Work Order	#: ENRJQ1AA	Matrix: WATER
-----------------------------	------------	-------------	---------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	15	1.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	. ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND .	1.0	ug/L
Trichloroethene	7.1	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3- chloropropane (DBCP)	ND	2.0	ug/L
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	•
Dibromofluoromethane	104	(80 - 120)	·
1,2-Dichloroethane-d4	102	(72 - 127)	-
4-Bromofluorobenzene	99	(79 - 119)	
Toluene-d8	105	(79 - 119)	

QC DATA ASSOCIATION SUMMARY

D1K120175

Sample Preparation and Analysis Control Numbers

CAMPI E#	MATRIX	ANALYTICAL METHOD	LEACH	PREP	MC DIDIH
SAMPLE#	MAIRIA	METHOD	BATCH #	BATCH #	MS RUN#
001	SOLID	SW846 8260B		1330507	1330222
	SOLID	MCAWW 160.3 MOD		1331246	1331106
002	SOLID	SW846 8260B	·	1325469	1325235
002					
	SOLID	MCAWW 160.3 MOD		1331246	1331106
003	WATER	SW846 8260B		1324476	1324235
004	WATER	SW846 8260B		1324476	1324235
		· · · · · · · · · · · · · · · · · · ·	τ		
005	WATER	SW846 8260B		1324476	1324235
225		G110.4.6. 0.0.6.0.T			
006	WATER	SW846 8260B		1324476	1324235
007	WATER	SW846 8260B		1324476	1324235
800	WATER	SW846 8260B		1325275	1325115
				•	v
009	WATER	SW846 8260B	*	1324476	1324235

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: EPG3D1AC-LCS Matrix...... SOLID

LCS Lot-Sample#: D1K260000-507 EPG3D1AD-LCSD

 Prep Date....: 11/21/01
 Analysis Date..: 11/21/01

 Prep Batch #...: 1330507
 Analysis Time..: 10:29

Dilution Factor: 1

PARAMETER 1 1 Dishlorosthoro	PERCENT RECOVERY	RECOVERY LIMITS	RPD RPD LIMITS	METHOD
1,1-Dichloroethene	93	(78 - 118)		SW846 8260B
Dommono	91	(78 - 118)	2.1 (0-25)	SW846 8260B
Benzene	104	(79 - 121)		SW846 8260B
	103 ,	. (79 – 121)	0.46 (0-25)	SW846 8260B
Chlorobenzene	82	(76 - 116)		SW846 8260B
	84	(76 - 116)	2.4 (0-25)	SW846 8260B
Toluene	83	(76 - 116)		SW846 8260B
•	86	(76 - 116)	4.0 (0-25)	SW846 8260B
Trichloroethene	102	(83 ~ 123)		SW846 8260B
	100	(83 - 123) _.	2.1 (0-25)	SW846 8260B
,		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane		107	(80 - 120)	
		110	(80 - 120)	
1,2-Dichloroethane-d4	•	101	(79 - 125)	
		101	(79 - 125)	
4-Bromofluorobenzene		93	(71 - 132)	
		94	(71 - 132)	

86 94 (77 - 117)

(77 - 117)

NOTE(S):

Toluene-d8

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: EPG3D1AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K260000-507 EPG3D1AD-LCSD

Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1330507 Analysis Time..: 10:29

Dilution Factor: 1

	SPIKE	MEASUREI)	PERCENT		
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	50.0	46.6	ug/kg	93		SW846 8260B
•	50.0	45.6	ug/kg	91	2.1	SW846 8260B
Benzene	50.0	51.8	ug/kg	104		SW846 8260B
	50.0	51.5	ug/kg	103	0.46	SW846 8260B
Chlorobenzene	50.0	41.2	ug/kg	82		SW846 8260B
	50.0	42.2	ug/kg	84	2.4	SW846 8260B
Toluene	50.0	41.4	ug/kg	83		SW846 8260B
*	50.0	43.1	ug/kg	86	4.0	SW846 8260B
Trichloroethene	50.0	51.2	ug/kg	102		SW846 8260B
	50.0	50.1	ug/kg	100	2.1	SW846 8260B
			PERCENT	RECOVERY		
SURROGATE	<u>.</u>		RECOVERY	LIMITS	_	
Dibromofluoromethane			107	(80 - 120)	
	•		110	(80 - 120)	
1,2-Dichloroethane-d4			101	(79 - 125	()	
•	•		101	(79 - 125		
4-Bromofluorobenzene			93	(71 - 132)	
			94	(71 - 132	:)	•
Toluene-d8			86	(77 - 117)	
			94	(77 - 117)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: EPE4M1AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-469 EPE4M1AD-LCSD

Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 11:17

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	•
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	97	(78 - 118)		SW846 8260B
	99	(78 - 118)	2.3 (0-25)	SW846 8260B
Benzene	106	(79 - 121)		SW846 8260B
	110	(79 - 121)	3.3 (0-25)	SW846 8260B
Chlorobenzene	89	(76 - 116)	(5 22,	SW846 8260B
	90	(76 - 116)	1.8 (0-25)	SW846 8260B
Toluene	89	(76 - 116)	1.0 (0 25)	SW846 8260B
•	92	(76 - 116)	2.9 (0-25)	SW846 8260B
Trichloroethene	101	(83 - 123)	2.9 (0-23)	
	108		C 0 (0 05)	SW846 8260B
•	109	(83 - 123)	6.9 (0-25)	SW846 8260B
		DED CELE		
CIDDOCATE		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane		109	(80 - 120)	•
		112	(80 - 120)	
1,2-Dichloroethane-d4		103	(79 - 125)	
		104	(79 - 125)	
4-Bromofluorobenzene		102	(71 - 132)	
		101	(71 - 132)	•
Toluene-d8		94		·
•	*	95	(77 - 117)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: EPE4M1AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-469 EPE4M1AD-LCSD

 Prep Date....:
 11/19/01
 Analysis Date..:
 11/19/01

 Prep Batch #...:
 1325469
 Analysis Time..:
 11:17

Dilution Factor: 1

	SPIKE	MEASURED		PERCENT		
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	50.0	48.5	ug/kg	97		SW846 8260B
	50.0	49.7	ug/kg	99	2.3	SW846 8260B
Benzene	50.0	53.1	ug/kg	106	•	SW846 8260B
•	50.0	54.9	ug/kg	110	3.3	SW846 8260B
Chlorobenzene	50.0	44.3	ug/kg	89		SW846 8260B
	50.0	45.1	ug/kg	90	1.8	SW846 8260B
Toluene	50.0	44.5	ug/kg	89		SW846 8260B
	50.0	45.9	ug/kg	92	2.9	SW846 8260B
Trichloroethene	50.0	50.3	ug/kg	101		SW846 8260B
	50.0	53.9	ug/kg	108	6.9	SW846 8260B
•						
•	•		PERCENT	RECOVERY		
SURROGATE	•		RECOVERY	LIMITS	<u>.</u>	
Dibromofluoromethane			109	(80 - 120)	
			112	(80 - 120)	†
1,2-Dichloroethane-d4			103	(79 - 125)	
			104	(79 - 125)	
4-Bromofluorobenzene			102	(71 - 132)	
•			101	(71 - 132)	
Toluene-d8			94	(77 - 117)	
			95	(77 - 117)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: EPCJA1AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K200000-476 EPCJA1AD-LCSD

Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324476 Analysis Time..: 09:59

Dilution Factor: 1

•	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	94	(79 - 119)		SW846 8260B
	91	(79 - 119)	3.3 (0-20)	SW846 8260B
Benzene	100	(79 - 119)		SW846 8260B
	96	(79 - 119)	3.3 (0-20)	SW846 8260B
Chlorobenzene	93	(76 - 116)		SW846 8260B
	95	(76 - 116)	2.6 (0-20)	SW846 8260B
Toluene	89	(75 - 122)		SW846 8260B
	90	(75 - 122)	2.0 (0-20)	SW846 8260B
Trichloroethene	100	(81 - 121)	•	SW846 8260B
	97	(81 - 121)	2.8 (0-20)	
		•		
		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane		101	(80 - 120)	
	•	98	(80 - 120)	
1,2-Dichloroethane-d4		101	(72 - 127)	
		95	(72 - 127)	
4-Bromofluorobenzene		101	(79 - 119)	
		107	(79 - 119)	•
Toluene-d8	•	96	(79 - 119)	
		99	(79 - 119) $(79 - 119)$	•
			(,) - 112)	

NOTE(S)-

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: EPCJA1AC-LCS Matrix..... WATE

LCS Lot-Sample#: D1K200000-476 EPCJA1AD-LCSD

Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324476 Analysis Time..: 09:59

Prep Batch #...: 1324476 Analysis Time..:
Dilution Factor: 1

	SPIKE	MEASURE	Ď	PERCENT		•
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	10.0	9.37	ug/L	94		SW846 8260B
	10.0	9.07	ug/L	91	3.3	SW846 8260B
Benzene	10.0	9.98	ug/L	100 '		SW846 8260B
	10.0	9.65	ug/L	96	3.3	SW846 8260B
Chlorobenzene	10.0	9.30	ug/L	93		SW846 8260B
	10.0	9.54	ug/L	95	2.6	SW846 8260B
Toluene	10.0	8.86	ug/L	89		SW846 8260B
	10.0	9.03	ug/L	90	2.0	SW846 8260B
Trichloroethene	10.0	10.0	ug/L	100		SW846 8260B

ug/L

97 `

2.8

SW846 8260B

	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	101	(80 - 120)		
	98	(80 - 120)		
1,2-Dichloroethane-d4	101	(72 - 127)		
	95	(72 - 127)		
4-Bromofluorobenzene	101	(79 - 119)		
	107	(79 - 119)		
Toluene-d8	96	(79 - 119)		
	99	(79 - 119)		

9.73

10.0

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: EPD451AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K210000-275 EPD451AD-LCSD

Prep Date....: 11/20/01 Analysis Date..: 11/20/01

Prep Batch #...: 1325275 Analysis Time..: 10:04

Dilution Factor: 1

	PERCENT	RECOVERY	R	PD	•		
PARAMETER	RECOVERY	LIMITS	RPD L	IMITS	METHO	D	
1,1-Dichloroethene	92	(79 - 119)	-			8260B	
	94	(79 - 119)	1.6 (0-20)		8260B	
Benzene	94	(79 - 119)	F .	•	_	8260B	
	96	(79 - 119)	2.4 (0-20)	SW846	8260B	
Chlorobenzene	88	(76 - 116)			SW846	8260B	
_	94	(76 - 116)	6.5 (0-20)	SW846	8260B	
Toluene	100	(75 - 122)			SW846	8260B	
	102	(75 - 122)	2.3 (0-20)	SW846	8260B	
Trichloroethene	87	(81 - 121)			SW846		
	92	(81 - 121)	4.8 (0-20)	SW846	8260B	
	•	PERCENT	RECOVERY	Z			
SURROGATE		RECOVERY	LIMITS				
Dibromofluoromethane	· • • • • • • • • • • • • • • • • • • •	109	/80 - 15	201			

SURROGATE		FERCENT	RECOVERY
		RECOVERY	LIMITS
Dibromofluoromethane	•	109	(80 - 120)
	•	110	(80 - 120)
1,2-Dichloroethane-d4		114	(72 - 127)
4.75		114	(72 - 127)
4-Bromofluorobenzene		92	(79 - 119)
m=1 10		96 '	(79 - 119)
Toluene-d8		109	(79 - 119)
		109	(79 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: EPD451AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K210000-275 EPD451AD-LCSD

 Prep Date....:
 11/20/01
 Analysis Date..:
 11/20/01

 Prep Batch #...:
 1325275
 Analysis Time..:
 10:04

Dilution Factor: 1

	SPIKE	MEASURED		PERCENT		
PARAMETER	TRUOMA	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	10.0	9.21	ug/L	92		SW846 8260B
	10.0	9.37	ug/L	94	1.6	SW846 8260B
Benzene	10.0	9.43	ug/L	94		SW846 8260B
	10.0	9.65	ug/L	96	2.4	SW846 8260B
Chlorobenzene	10.0	8.81	ug/L	88		SW846 8260B
	10.0	9.41	ug/L	94	6.5	SW846 8260B
Toluene	10.0	10.0	ug/L	100		SW846 8260B
	10.0	10.2	ug/L	102	2.3	· SW846 8260B
Trichloroethene	10.0	8.74	ug/L	87	* *	SW846 8260B
	10.0	9.17	ug/L	92	4.8	SW846 8260B
·						
			PERCENT	RECOVERY		
SURROGATE		•	RECOVERY	LIMITS		
Dibromofluoromethane			109	(80 - 120		_
			110	(80 - 120)	
1,2-Dichloroethane-d4			114	(72 - 127)	
			114	(72 - 127)	
4-Bromofluorobenzene			92	(79 - 119) .	
			96	(79 - 119)	
Toluene-d8			109	(79 - 119)	
·			109	(79 - 119)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: EPG3D1AA Matrix.....: SOLID

MB Lot-Sample #: D1K260000-507

Prep Date....: 11/21/01 Analysis Time..: 11:20

Analysis Date..: 11/21/01 Prep Batch #...: 1330507

Dilution Factor: 1

		REPORTI				
PARAMETER	RESULT	LIMIT	UNITS	METHOD	`.	
Benzene	ND	5.0	ug/kg	SW846 8260B		
Bromobenzene	ND	5.0	ug/kg	SW846 8260B		
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B	•	
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B	*	
Bromoform	ND	5.0	ug/kg	SW846 8260B		
Bromomethane	ND	10	ug/kg	SW846 8260B		
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B		
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B		
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B		
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B		
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B		
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B		
Chloroethane	ND	10	ug/kg	SW846 8260B		
Chloroform	ND	10	ug/kg	SW846 8260B		
Chloromethane	ND	10	ug/kg	SW846 8260B		
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B		
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B		
Dibromomethane	ND	5.0	ug/kg	SW846 8260B		
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B		
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B		
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B		
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B		
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B		
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B		
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B		
cis-1,2-Dichloroethene	ND	2.5	ug/kġ	SW846 8260B		
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B		
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B		
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B		
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B		
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B		
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B		
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B		
Hexachlorobutadiene	ND .	5.0	ug/kg	SW846 8260B		
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B		
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B		
Methylene chloride	ND	5.0	ug/kg	SW846 8260B		
Naphthalene	ND	5.0	ug/kg	SW846 8260B		
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B		
Styrene	ND	5.0	ug/kg	SW846 8260B		
1,1,1,2-Tetrachloroethane	. ND	5.0	ug/kg	SW846 8260B		

(Continued on next page)

GC/MS Volatiles

	¥	REPORTING			•
PARAMETER	RESULT	LIMIT	UNITS	METHO	D '
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846	8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846	8260B
Toluene	ND	5.0	ug/kg	SW846	8260B
l,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846	8260B
1,2,4-Trichloro- benzene	ND	5.0	ug/kg	SW846	8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846	8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg		8260B
richloroethene	ND	5.0	ug/kg		8260B
.,2,3-Trichloropropane	ND	5.0	ug/kg	SW846	8260B
,,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846	8260B
.,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846	8260B
inyl chloride	ND	5.0	ug/kg	SW846	8260B
-Xylene	ND	2.5	ug/kg	SW846	8260B
-Xylene & p-Xylene	ND	2.5	ug/kg	SW846	8260B
,2-Dibromo-3- chloropropane (DBCP)	ND	10	ug/kg	SW846	8260B
,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846	8260B
	PERCENT	RECOVERY	Z .		
URROGATE	RECOVERY	LIMITS .	<u>. </u>		
ibromofluoromethane	115	(80 - 12	20)		•
,2-Dichloroethane-d4	108	(79, - 12	25)		
-Bromofluorobenzene	102	(71 - 13	32)	* *	
oluene-d8	97	(77 - 11	.7)		

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

GC/MS Volatiles

Client Lot #...: D1K120175

MB Lot-Sample #: D1K210000-469

Work Order #...: EPE4M1AA

Matrix..... SOLID

Prep Date....: 11/19/01 Prep Batch #...: 1325469

Analysis Time..: 12:10

Analysis Date..: 11/19/01

Dilution Factor: 1

		REPORT:	ING		
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
Benzene	ND	5.0	ug/kg	SW846 8260B	-
Bromobenzene	ND	5.0	ug/kg	SW846 8260B	
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B	
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B	
Bromoform	ND	5.0	ug/kg	SW846 8260B	
Bromomethane	ND	10	ug/kg	SW846 8260B	
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B	
Chlorobenzene	ND ·	5.0	ug/kg	SW846 8260B	
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B	
Chloroethane	ND`	10	ug/kg	SW846 8260B	
Chloroform	ND	10	ug/kg	SW846 8260B	
Chloromethane	ND	. 10	ug/kg	SW846 8260B	
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B	
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B	
Dibromomethane	ND	5.0	ug/kg	SW846 8260B	
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B	
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B	
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B	
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B	
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B	
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B	
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B	
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B	
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B	
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B	
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B	
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B	
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B	
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B	
Trichlorofluoromethane	ND .	10	ug/kg	SW846 8260B	
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B	
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B	
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B	
Methylene chloride	ND	5.0	ug/kg	SW846 8260B	
Naphthalene	ND .	5.0	ug/kg	SW846 8260B	
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B	
Styrene	ЙD	5.0	ug/kg	SW846 8260B	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B	

(Continued on next page)

GC/MS Volatiles

		REPORTIN	iG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trichloro- benzene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND .	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
o-Xylene	ND	2.5	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	2.5	ug/kg	SW846 8260B
1,2-Dibromo-3- chloropropane (DBCP)	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846 8260B
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	111	(80 - 12	0)	
1,2-Dichloroethane-d4	105	(79 - 12		
4-Bromofluorobenzene	101	(71 - 13	2)	
Toluene-d8	96	(77 - 11	7)	

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K120175

MB Lot-Sample #: D1K200000-476

Work Order #...: EPCJA1AA

Matrix....: WATER

12 200 Sample #: Dinzoooo-476

Prep Date....: 11/19/01
Prep Batch #...: 1324476

Analysis Time..: 10:49

Analysis Date..: 11/19/01

Dilution Factor: 1

REPORTING

		REPORTI		
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND ·	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
Isopropylbenzene	NĎ	1.0	ug/L	SW846 8260B
1,2,4-Trichloro-	ND .	1.0	ug/L	SW846 8260B
benzene			-3/ -	54040 0200B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
1,2-Dibromo-3-	ND	2.0	ug/L	SW846 8260B
chloropropane (DBCP)	•	-	-3/-	5.10±0 0200B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

GC/MS Volatiles

		REPORTI	vig.				
PARAMETER	RESULT	LIMIT	UNITS	METHOD	· 		
Bromobenzene	ND	1.0	ug/L	SW846 8260B	•		
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B			
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B			
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B			
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B			
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B			
Dibromomethane	ND	1.0	ug/L	SW846 8260B			
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B	-		
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B			
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B			
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B			
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B			
Naphthalene	ND	1.0	ug/L	SW846 8260B			
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B			
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B			
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B			
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B			
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B			
	PERCENT	RECOVER	Y				
SURROGATE	RECOVERY	LIMITS					
Dibromofluoromethane	99	(80 - 12	20)				
1,2-Dichloroethane-d4	97	(72 - 12	27)				
4-Bromofluorobenzene	104	(79 - 13	19)				
Toluene-d8	97	(79 - 1	19)				

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K120175

MB Lot-Sample #: D1K210000-275

Prep Date....: 11/20/01

Work Order #...: EPD451AA

Matrix....: WATER

Analysis Date..: 11/20/01

Dilution Factor: 1

Prep Batch #...: 1325275

Analysis Time..: 10:57

•		REPORTI		
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND ·	1.0	ug/L	SW846 8260B
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	. ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND .	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND .	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

GC/MS Volatiles

		REPORTI	1G		
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
1,1,2,2-Tetrachloroethane	ND ,	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trichloro-	ND	1.0	ug/L	SW846 8260B	*.
benzene				•	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	4.5
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND .	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
o-Xylene	ND	1.0	ug/L	SW846 8260B	
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B	
1,2-Dibromo-3-	ND	2.0	ug/L	SW846 8260B	
chloropropane (DBCP)					
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B	
	PERCENT	RECOVERY	7	-	
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane *	109	(80 - 12	:0)		
l,2-Dichloroethane-d4	112	(72 - 12	7)		
1-Bromofluorobenzene	98	(79 - 11	.9) ·		
Toluene-d8	113	(79 - 11	.9)	**	

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: EN6LX1AC-MS Matrix.....: SOLID

MS Lot-Sample #: D1K160345-001 EN6LX1AD-MSD

Date Sampled...: 11/14/01 08:50 Date Received..: 11/16/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Prep Batch #...: 1330507 Analysis Time..: 12:46

Dilution Factor: 1

·							
	PERCENT	RECOVERY		RPD .			
PARAMETER .	RECOVERY	LIMITS	RPD	LIMITS	METHO)	
1,1-Dichloroethene	92	(78 - 118)			-	8260B	
	98	(78 - 118)	6.6	(0-25)	SW846	8260B	
Benzene	103	(79 - 121)			SW846	8260B	
	112	(79 - 121)	8.9	(0-25)	SW846	8260B	
Chlorobenzene	78	(76 - 116)	÷.			8260B	
	81	(76 - 116)	3.7	(0-25)	SW846		
Toluene	82	(76 - 116)			SW846	8260B	
	86	(76 - 116)	4.4	(0-25)	SW846		
Trichloroethene	102	(83 - 123)			SW846	8260B	
	107	(83 - 123)	4.3	(0-25)	SW846	8260B	
		PERCENT		RECOVERY			
SURROGATE		RECOVERY		LIMITS			
Dibromofluoromethane		107		(80 - 120	<u> </u>	*	
•	We the second of	112		(80 - 120	•		
1,2-Dichloroethane-d4		107		(79 - 125)		
		112 ,		(79 - 125			
4-Bromofluorobenzene		99		(71 - 132)		
		98		(71 - 132			
Toluene-d8		90		(77 - 117			
•		94		(77 - 117	•		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Work Order #...: EN6LX1AC-MS Matrix....: SOLID Client Lot #...: D1K120175

MS Lot-Sample #: D1K160345-001 EN6LX1AD-MSD

Date Sampled...: 11/14/01 08:50 Date Received..: 11/16/01 Prep Date....: 11/21/01 Analysis Date..: 11/21/01 Analysis Time..: 12:46

Prep Batch #...: 1330507 Dilution Factor: 1

	SAMPLE	SPIKE	MEASRD		PERCENT		•
PARAMETER	TRUOMA	TMA	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	ND	50.0	46.1	ug/kg	92		SW846 8260B
	ND	50.0	49.2	ug/kg	98	6.6	SW846 8260B
Benzene	ND	50.0	51.4	ug/kg	103		SW846 8260B
	ND	50.0	56.2	ug/kg	112	8.9	SW846 8260B
Chlorobenzene	ND	50.0	39.1	ug/kg	78		SW846 8260B
	ND	50.0	40.6	ug/kg	81	3.7	SW846 8260B
Toluene	ND	50.0	40.9	ug/kg	82		SW846 8260B
•	ND	50.0	42.8	ug/kg	86	4.4	SW846 8260B
Trichloroethene	ND	50.0	51.2	ug/kg	102		SW846 8260B
	ND	50.0	53.5	ug/kg	107	4.3	SW846 8260B

PERCENT	RECOVERY
RECOVERY	LIMITS
107	(80 - 120)
112	(80 - 120)
107	(79 - 125)
112	(79 - 125)
99	(71 - 132)
98	(71 - 132)
90	(77 - 117)
94	(77 - 117)
	RECOVERY 107 112 107 112 99 98 90

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: ENQ511AN-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-022 ENQ511AP-MSD

Date Sampled...: 11/07/01 10:40 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 13:11

Dilution Factor: 1

	PERCENT	RECOVERY		RPD		
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOI) .
1,1-Dichloroethene	93	(78 - 118)	i		SW846	8260B
	101	(78 - 118)	8.6	(0-25)	SW846	8260B
Benzene	99	(79 - 121)			SW846	8260B
	109	(79 - 121)	9.9	(0-25)	SW846	8260B
Chlorobenzene	80	(76 - 116)			SW846	8260B
-	87	(76 - 116)	8.8	(0-25)	SW846	8260B
Toluene	80	(76 - 116)	*		SW846	8260B
	89	(76 - 116)	10	(0-25)	SW846	8260B
Trichloroethene	96	(83 - 123)			SW846	8260B
	108	(83 - 123)	12	(0-25)	SW846	8260B
,		PERCENT		RECOVERY	4	
SURROGATE		RECOVERY		LIMITS	,	
Dibromofluoromethane		106		(80 - 120)	
		113		(80 - 120)	
1,2-Dichloroethane-d4	8	102		(79 - 125)	
		109		(79 - 125)	
1-Bromofluorobenzene		96		(71 - 132)	
*		101		(71 - 132)	
Toluene-d8		88		(77 - 117		
		94		(77 - 117		i

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: ENQ511AN-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-022 ENQ511AP-MSD

Date Sampled...: 11/07/01 10:40 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 13:11

Dilution Factor: 1

	SAMPLE	SPIKE	MEASRD		PERCENT	•			. **
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOL		
1,1-Dichloroethene	ND	50.0	46.3	ug/kg	93		SW846	8260B	
	ND	50.0	50.5	ug/kg	101	8.6	SW846	8260B	
Benzene	ND	50.0	49.3	ug/kg	99		SW846	8260B	
	ND	50.0	54.5	ug/kg	109	9.9	SW846	8260B	
Chlorobenzene	ND	50.0	40.0	ug/kg	80		SW846	8260B	
	ND	50.0	43.6	ug/kg	87	8.8	SW846	8260B	
Toluene	ND	50.0	40.2	ug/kg	80		SW846	8260B	
	ND	50.0	44.4	ug/kg	89	10	SW846	8260B	
Trichloroethene	ND	50.0	48.1	ug/kg	96		SW846	8260B	
	ND	50.0	54.2	ug/kg	108	12	SW846	8260B	
:					٠.				
			PERCENT		RECOVERY				
SURROGATE			RECOVER	<u>Y</u>	LIMITS	_			
Dibromofluoromethane			106		(80 - 120)	1)			- 4
			113		(80 - 120	1)			•
1,2-Dichloroethane-d4			102		(79 - 125	i) `			
			109		(79 - 125	;) ,			
4-Bromofluorobenzene			96		(71 - 132	:)		-	•
			101	* *	(71 - 132	:) •			
Toluene-d8			88 - "	•	(77 - 117	')			
			94		(77 - 117	')			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: ENP781CC-MS Matrix..... WATER

MS Lot-Sample #: D1K100172-013 ENP781CD-MSD

 Date Sampled...:
 11/09/01 09:00 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324476 Analysis Time...:
 13:40

Dilution Factor: 1

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	90	(79 - 119)			SW846 8260B
	91	· (79 - 119)	1.0	(0-20)	SW846 8260B
Benzene	92	(79 - 119)			SW846 8260B
	95	(79 - 119)	2.9	(0-20)	SW846 8260B
Chlorobenzene	89	(76 - 11 6)			SW846 8260B
	92	(76 - 116)	3.7	(0-20)	SW846 8260B
Toluene	86	(75 - 122)			SW846 8260B
	89	(75 - 122)	3.9	(0-20)	SW846 8260B
Trichloroethene	98	(81 - 121)			SW846 8260B
•	98	(81 - 121)	0.03	(0-20)	SW846 8260B
•	· •	PERCENT		RECOVERY	
SURROGATE		RECOVERY		LIMITS	
Dibromofluoromethane		102 ·		(80 - 120)
1	Ÿ	102		(80 - 120)
1,2-Dichloroethane-d4		99		(72 - 127)

101

102

104

98

98

(72 - 127)

(79 - 119)

(79 - 119)

(79 - 119)

(79 - 119)

NOT	71.7	101	_
13(1)	, r.	ו כי ו	-

Toluene-d8

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

4-Bromofluorobenzene

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: ENP781CC-MS Matrix..... WATER

MS Lot-Sample #: D1K100172-013 ENP781CD-MSD

 Date Sampled...:
 11/09/01 09:00
 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324476
 Analysis Time...:
 13:40

Dilution Factor: 1

	SAMPLE	SPIKE	MEASRD		PERCENT		
PARAMETER	TUUOMA	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	ND	10.0	9.02	ug/L	90		SW846 8260B
	ND	10.0	9.11	ug/L	91	1.0	SW846 8260B
Benzene	ND	10.0	9.23	ug/L	92		SW846 8260B
	ND	10.0	9.51	ug/L	95	2.9	SW846 8260B
Chlorobenzene	ND	10.0	8.86	ug/L	89		SW846 8260B
	ND	10.0	9.20	ug/L	92	3.7	SW846 8260B
Toluene	ND	10.0	8.57	ug/L	86		SW846 8260B
	ND	10.0	8.91	ug/L	89	3.9	SW846 8260B
Trichloroethene	ND	10.0	9.78	ug/L	98		SW846 8260B
	ND	10.0	9.78	uq/L	98	0.03	SW846 8260B

·	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	102	(80 - 120)		
	102	(80 - 120)		
1,2-Dichloroethane-d4	99	(72 - 127)		
	101	(72 - 127)		
4-Bromofluorobenzene	102	(79 - 119)		
	. 104	(79 - 119)		
Toluene-d8	98	(79 - 119)		
	98	(79 - 119)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: ENV3V1A1-MS Matrix..... WATER

MS Lot-Sample #: D1K130267-010 ENV3V1A2-MSD

 Date Sampled...:
 11/11/01 12:35
 Date Received...:
 11/13/01

 Prep Date.....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325275
 Analysis Time...:
 12:21

Dilution Factor: 4

	PERCENT	RECOVERY		RPD								
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD							
1,1-Dichloroethene	96	(79 - 119)			SW846 8260	В						
	95	(79 - 119)	0.77	(0-20)	SW846 8260	В						
Benzene	97	(79 - 119)			SW846 8260	В						
A.	96	(79 - 119)	1.4	(0-20)	SW846 8260	В						
Chlorobenzene	94	(76 - 116)			SW846 8260	В						
. •	94	(76 - 116)	0.44	(0-20)	SW846 8260	В						
Toluene	107	(75 - 122)			SW846 8260	В						
	106 .	(75 - 122)	0.68	(0-20)	SW846 8260	В						
Trichloroethene	88	(81 - 121)			SW846 8260	В						
	77 a	(81 - 121)	3.0	(0-20)	SW846 8260	В						
		•										
		PERCENT	1	RECOVERY		•						
SURROGATE	<u> </u>	RECOVERY		LIMITS								
Dibromofluoromethane		105	a *	(80 - 120)							
		104		(80 - 120)							
1,2-Dichloroethane-d4	•	105		(72 - 127)							
	•	107		(72 - 127)							
4-Bromofluorobenzene		93		(79 - 119)	•						
	*	94		(79 - 119	•							
Toluene-d8		113	•	(79 - 119	•							
		112		(79 - 119								

NOTE(S)

Calculations are performed before rounding to avoid round-off errors in calculated results.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120175 Work Order #...: ENV3V1A1-MS Matrix.....: WATER

MS Lot-Sample #: D1K130267-010 ENV3V1A2-MSD

Date Sampled...: 11/11/01 12:35 Date Received..: 11/13/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 12:21

Dilution Factor: 4

	SAMPLE	SPIKE	MEASRD		PERCENT			•				
PARAMETER	AMOUNT	AMT	TNUOMA	UNITS	RECOVERY	RPD	METHOD					
1,1-Dichloroethene	thene ND 40.0 38.4		38.4	ug/L	96		SW846	8260B				
	ND	40.0	38.1	ug/L	95	0.77	SW846	8260B				
Benzene	ND	40.0	38.9	ug/L	97		SW846	8260B				
	ND	40.0	38.3	ug/L	96	1.4	SW846	8260B				
Chlorobenzene	ND ·	40.0	37.7	ug/L	94		SW846	8260B				
	ND	40.0	37.5	ug/L	94	0.44	SW846	8260B				
Toluene	ND	40.0	42.7	ug/L	107	• .	SW846	8260B				
	ND ·	40.0	42.4	ug/L	106	0.68	SW846	8260B				
Trichloroethene	120	40.0	158	ug/L	88		SW846	8260B				
	120	40.0	153	ug/L	77 a	3.0	SW846	8260B				
•			PERCENT	,	RECOVERY		*					
SURROGATE			RECOVER	Y	LIMITS			•				
Dibromofluoromethane		٠.	105		(80 - 120	<u> </u>		4				
			104		(80 - 120))		1				
1,2-Dichloroethane-d4			105		(72 - 127	7)`						
			107	· ·	(72 - 127	7)						
					*	,						

(79 - 119)

(79 - 119)

(79 - 119)

(79 - 119)

93

94

113

112

NOTE(S):

Toluene-d8

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

4-Bromofluorobenzene

a Spiked analyte recovery is outside stated control limits.

HOLD TIME REPORT

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GCMS VOA

Lab ID #	Well ID	Collectio Date	n Method	Ext Dif	Ana Dif	Ana Hold	Extraction Date	Analysis Date	Method Description
D1K120175001	B-47-3	11/08/01	11:00						
			8260B		13.	14		11/21/01 11:55	AOV
D1K120175002	B-47-14	11/08/01	11:15						
			8260B		11	14	* * * * * * * * * * * * * * * * * * *	11/19/01 18:45	VOA
D1K120175003	B-47-16	11/08/01	11:20				e H		
			8260B		11	14		11/19/01 14:55	VCA
D1K120175004	B-78-20	11/08/01	12:00			•			
			8260B		11	14		11/19/01 15:20	VOA
D1K120175005	RB-118	11/08/01	12:30	•					
			8260B		11	14		11/19/01 15:44	VOA
D1K120175006	TB-02	11/09/01	00:00						
			8260B		10	14	a.	11/19/01 16:09	VOA
D1K120175007	TB-03	11/09/01	00:00				•	*	
			8260B		10	14	•	11/19/01 16:34	VCA
D1K120175008	B-60-18	11/09/01	12:25					•	
			8260B		11	14		11/20/01 16:18	VCA
D1K120175009	B-82-18	11/09/01	12:45					•	
			8260B		10	14		11/19/01 17:23	VOA

Wichita, KS

HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

ID #	Well ID	Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date	Analysis Date	Method Description
D1K120175001	B-47-3	11/08/01 1	1:00							
			160.3 MOD		18		99		11/26/01	15:00
D1K120175002	B-47-14	11/08/01 1	1:15							
			160.3 MOD		18		99		11/26/01	15:00

Chain of Custody Record

STL Denver 4955 Yarrow Street Arvada, CO 80002

HITE - Stays with the Sample; CANARY - Returned to Client with Report, PINK - Field Cop

2,79M

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700) DEN (0900)													r <u>. </u>								
Client C. J. KI (I I.) T	6 44	Project N	lanager 7	/	6			C	1.	11	c)		Date /	1	· 10	<i>a 1</i>	Cha	in of Custody f	lumber L A		
Jutety -//leen (W/chita) I	nc. Facilit	Telephor	e Numbe	r (Area C	((C	i My € x Num	ber	- W	re,	CC	<u> </u>		Lab No		/ 0		-	<u>U411</u>	<u> </u>		
2549 Nurth Now York Avenu	ie.	303 -	93F.	553	30	3 - <i>9</i>	38	-53	520)						Pag	ge <u> </u>	_ of _	<u>6</u>		
City State Zip	ufety-Kleen (Wichita) Inc. Facility ress 549 Nurth New York Avanue State Zip Code Wichita KS 67219									1			lysis (A space								
Wichita KS 6	7219	Russs				ae	You	er			$\neg \neg$	1	space	is riee	laea)						
Project Name and Location (State)		Carrier/V	/aybill Nu	ımber						8	ر 2 م	,				1					
S-Kwichita Recility Withit	<u>, AJ</u>				1		a atalas	P			1523)						1 1	Special Condition			
Community (Manage Crack district)	•		М	atrix			ontaine eserva			1 -1	\$ C				1 1						
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Aqueous	Sed	Unpres	H2SO4	HNOS	NaOH	ZnAC/ NaOH	3	Print										
B-47-3	11/8/01	11 60			Х					X						_					
B-47-14	11/5/01	1115		X	X					X											
B-47 - 16	11/8/01	1/20	X		,		X			X											
B 78 - 26	11/8/01	1200	X				X			X								· .			
RB-118	11/8/01	1230	X				X			X											
TB-OD	lab	lub	X				X			Х											
TB-03	lub	lub	X				人			X								*			
																				· · · · · · · · · · · · · · · · · · ·	
			-			A	//														
						771	4		7/2	1/0	/										
	-	-																			
																-					
Possible Hazard Identification	1		Sample	Disposa						•				(/	A lee ma	ay be a	ssesse	d if samples ar	e retained		
	Poison B	Unknown	Re	turn To C	hent		sposal E Requirer			Archi	ve For		Mon	ths ic	onger th	an 3 m	onths)				
Turn Around Time Required	ave [] 21 Day	. Dav	ı,c				redan ei	nems	(Specii	y)											
24 Hours 48 Hours 7 Days 14 Days 21 Days Other 1 Relinquished By Date 11/9/21						1. Re	ceived			1/2	1/1						1	Date 10/01 Time 13 (
2. Relinquished by			ν	Time	_	2. Re	ceived		<u> </u>	T	100			,				Date	Time		
			·	Ture		2 0	eceived	D.,										Date	Time		
3. Relinquished By		Date		Time		13 AE	eceive()	υγ										Jui 0	1		
Comments	, , ,	!	- ,		-	. ,	,	,						,							
Dlack to Kan Taggel	en in LL N		0040	~ .	16	▶ .∕.	notes !	<i>l</i>											ı		

Chain or **Custody Record**

4955 Yarrow Street Arvada, CO 80002



Severn Trent Laboratories, Inc.

STL-4124 (0700) DEN (0900)														- 01		CLS		3	eve	err	1 1	rer	it Labo	rato	ries,	inc.
Sufety-Kleen (Wichity) F	acility	Project	Manag	ger I	(1150	ho	<u> </u>	(.c	/m	ero	m-Co	ok	L	1.	}		Date	//	191	101	<u> </u>		Chain of Cust			
2549 North News York Av		Teleph	Telephone Number (Area Code)/Fax Number 303 -938 - 5535 303 -938 - 55 Site Contact Russell Dunn Kur Yudor									Lab Number														
City State Zip	Code	Site Co	Site Contact La					Lab Contact						<u> </u>	A	Analysis (Attach list if							Page	<u> </u>	of <u>B</u>	
Wichity KS 2	od Nama and Landing (Cirty)			Rusel Dunn Carrier/Waybill Number					Kue Yuder						mo	ore s	pace I	is n	eede	<i>ed)</i> ⊤			_			
_ SK Wichila Facility, Wichil	a, KS	Carrier	/Waybii	ll Numl	ber							Q					ļ				1					
Contract/Purchase Order/Quote No.		Matrix					Containers & Preservatives						Salan									Spe Cond	cial In: litions	struction of Rece	ns/ eipt	
Sample I.D. No. and Description (Containers for each sample may be combined on one line,	Date	Time		Sea.	Suil	Unpres	H2SQ4	SONH	HCI	NaOH	ZnAc/ NaOH		3 3	752												
De-60-18	11/A/01 1	1752	λ	(X			X	1						7		_	+	 			
B-87·18	11/101 1	245	×						X			X		1					\dashv	\top		+	<u> </u>			
														1		 			7		+	-				
													+	\top	-	_			\dashv	\dashv	+	- -				
						1							\dagger	1					+	+	-					
)1	1						\top	1	1	\vdash	-			\dashv	+	╁	╁				
					1	4	1		1	5,1		1	\top	†	 			\dashv	\dashv	+	+	+	 			
						1			<u> </u>			\pm		+-					+	+	+		 			
						1	1 1					+	7	+				\dashv	\dashv	+	+	+				<u> </u>
					+	\top						\dashv	\dagger	1-				+	4	\pm	+	+	 			···
			1			-	1-1	\dashv	\neg		-	+-	+	+-				_	+	- -	\Rightarrow	-				
			_	+	-	 	\vdash	-	+	\dashv	+	+-	╁					-	+							
Possible Hazard Identification			Sam	ple Dis	posal		Ш.			!.			1_	<u></u>												
Furn Around Time Required		Unknown		Return	To Che	nt	OC F	ispos Requ	sal By iiremi	Lab ents	(Specil	Arci	hive	For _		<u> '</u>	Montl	hs i	(A lee longe	r thai	be and 3 m	onths	sed if samples	are ret	ained	-
24 Hours 48 Hours 7 Days 14 Da	ys 21 Days	Othe	r			 _										2										
1 Relinquished By 2 Relinquished By 2 Relinquished By		Date 1//4	01	1/3	10c	,	1 Re	Celv	in s	<i>#</i>	a	4	14	nv	f								Date Time 11/10/01 De			\sim
2. Neimquejet By	Date		Tim	e		2 Re	ceiv	ed B	y		7-6	 (, -										Date Time				
3. Relinquished By				Tun	e		3 Re	ceiv	ed B	<u></u>													Date Time			
Comments				_l			<u> </u>																			
л																										



STL Denver

4955 Yarrow Street Arvada, CO 80002-4517

Tel: 303 736 0100 Fax: 303 431 7171 www.stl-inc.com

ANALYTICAL REPORT

REVISED

SAFETY KLEEN (WICHITA, KS)

Lot #: D1K120137

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue, Suite 100 Boulder, CO 80301

> cc: Will Huskie cc: John Arbuthnot

SEVERN TRENT LABORATORIES, INC.

Kae E. Yoder Project Manager

January 15, 2002

This report shall not be reproduced except in full, without the written approval of the laboratory

Table Of Contents

Standard Deliverables

Report Contents

Total Number of Pages

Standard Deliverables

The Cover Letter and the Report Cover page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.

128

- Table of Contents
- Case Narrative
- Executive Summary Detection Highlights
- Methods Summary
- Method/Analyst Summary
- Lot Sample Summary
- Analytical Results
- QC Data Association Summary
- Hold Time Report
- Chain-of-Custody

CASE NARRATIVE

REVISED

Client Name:

Safety-Kleen (Wichita)

Project Name:

Project Number:

Sample Delivery Group: D1K120137
Original Narrative Date: 12/05/01
Revised Narrative Date: 01/15/02

Sample Receipt

- Twenty-one solid samples and three water samples, submitted by Safety-Kleen (Wichita), Inc., were received by STL Denver on November 10, 2001, according to documented sample acceptance procedures. The samples were received intact at temperatures of 2.7°C, 4.5°C and 3.8°C. Analyses requested on the associated chains-of-custody are as follows: GC/MS Volatiles, GC/MS Semivolatiles and Total Metals.
- Discrepancies were noted between the analyses requested on the chains-of-custody and the analyses requested on the sample container labels. As instructed by the client on November 12, 2001, analyses were performed per the chain-of-custody.
- The chain-of-custody (#41156) requests only VOC 8260B analyses for samples B-48-3, B-48-14, B-50-4 and B-50-15; however, as instructed by the client on November 12, 2001, the laboratory analyzed the samples for methods VOC 8260B and PAH 8270C. The chain-of-custody has been revised to reflect the correct analyses.
- The chain-of-custody (#41158) requests VOC 8260B analysis for sample B-70-0.5; however, as instructed by the client on November 12, 2001, the laboratory analyzed the sample for Total Metals. The chain-of-custody has been revised to reflect the correct analyses.
- > No other anomalies were encountered during sample receipt.

GC/MS Volatiles

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
B-56-3	Tetrachloroethene	68	5.0	ug/kg
B-56-16	Tetrachloroethene	7.2	5.0	ug/kg
B-56-18	Tetrachloroethene	55	1.0	ug/L
	Trichloroethene	8.9	1.0	ug/L
B-48-3	1,1-Dichloroethane	16	5.0	ug/kg
	i Vinyl chloride	8.4	5.0	ug/kg
B-48-14	Tetrachloroethene	71	5.0	ug/kg
	Trichloroethene	8.4	5.0	ug/kg
B-48-18	1,1-Dichloroethane	4.0	2.5	l ug/L
	cis-1,2-Dichloroethene	14	2.5	ug/L
	Tetrachloroethene	44	2.5	ug/L
	1,1,1-Trichloroethane	6.3	2.5	ug/L
	Trichloroethene	10	2.5	ug/L
B-50-4	cis-1,2-Dichloroethene	29	12	ug/kg
	Tetrachloroethene	370	25	ug/kg
	Trichloroethene	81	25	ug/kg
B-50-18	cis-1,2-Dichloroethene	1700	80	ug/L
	Tetrachloroethene	1700	80	ug/L
	1,1,1-Trichloroethane	340	80	ug/L
	Trichloroethene	960	80	ug/L

Sample ID	Parameter	Detection	RL	Units
B-60-1	1,1-Dichloroethane	5.2	5.0	ug/kg
	cis-1,2-Dichloroethene	23	2.5	ug/kg
	trans-1,2-Dichloroethene	6.6	2.5	ug/kg
	Tetrachloroethene	12	5.0	ug/kg
	Toluene	44	5.0	ug/kg
	Trichloroethene	6.9	5.0	ug/kg
	Vinyl chloride	9.7	5.0	ug/kg
B-60-16	Tetrachloroethene	8.8	5.0	ug/kg
	m-Xylene & p-Xylene	3.0	2.5	ug/kg
B-54-4	cis-1,2-Dichloroethene	5.1	2.5	ug/kg
	Tetrachloroethene	160	5.0	ug/kg
	Trichloroethene	11	5.0	ug/kg
B-53-5	Trichloroethene	200	25	ug/kg
B-61-4	Tetrachloroethene	32	5.0	ug/kg
	Trichloroethene	6.2	5.0	ug/kg
B-70-8	Tetrachloroethene	580	25	ug/kg
	Trichloroethene	25	25	ug/kg

- > The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. In some cases, due to analytes present above the linear calibration curve, samples had to be analyzed at a dilution. For samples analyzed at a dilution, the reporting limits have been adjusted relative to the dilution required. The following table details the associated dilutions.

Sample ID	Dilution
B-48-18	1:2.5
B-50-4	1:5
B-50-18	1:80
B-53-5	1:5
B-70-8	1:5

- > Samples B-56-18, B-48-18 and B-50-18 were received at the laboratory with a pH value >2.0. The samples were analyzed within the normal 14 day holding time; however, experimental evidence suggests that some aromatic compounds in wastewater samples, notably benzene, toluene, and ethylbenzene are susceptible to biological degradation if samples are not preserved to a pH of 2.0.
- Samples B-56-3 and B-61-4 exhibited internal standard 1,4-Dichlorobenzene-d4 outside the QC control limits. Upon repreparation and reanalysis, the internal standard area outliers were still present, confirming that this anomaly is most likely due to matrix interference. The original analysis data have been reported.

GC/MS Semivolatiles

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs. The samples were analyzed within holding time and without incident.

Total Metals

- Sample analysis revealed detectable concentrations at or above Safety-Kleen (Wichita)'s RLs, as detailed in the Executive Summary-Detection Highlights Report. The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- > Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high target constituent concentration, the Lead and Cadmium analysis for sample B-54-4 had to be performed at a 1:5 dilution. The reporting limits have been adjusted relative to the dilution required.

➤ Client specific, as well as standard batch, MS/MSD has been provided. Percent recoveries and RPD data could not be calculated, for the Cadmium and Lead MS/MSD performed on sample B-60-1, due to the sample concentrations reading greater than four times the spike amounts.

Revisions

The revisions included in this report are as follows:

- 1. GC/MS Semivolatiles Additional compounds, bis (2-Ethylhexyl) phthalate and Dimethyl phthalate, have been reported for samples B-48-3, B-48-14, B-50-4 and B-50-15, as requested.
- 2. GC/MS Semivolatiles As requested, the laboratory looked for any detectable concentrations present above the method detection limit (MDL) but below the reporting limit. None were found. The MDLs have been printed on the analytical data pages.

These data and reporting limits are being used specifically to meet the needs of this project. All RLs are supported by STL Denver's Method Detection Limits (MDLs). Reporting limits in this report are at or above the MDL.

I certify that the data presented in this report are accurate, complete, and meets the minimum quality assurance standards in 40-CFR 136, 40-CFR 141, and/or SW846. The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. An assessment of the quality of the data, noting any exceptions, outliers, and/or problems encountered have been narrated herein.

Kae E. Yoder / Project Manager Date

D1K120137

			REPORTING		ANALYTICAL
	PARAMETER	RESULT	LIMIT	UNITS	METHOD
B-56-	3 11/09/01 08:30 001				
	Tetrachloroethene	68	5.0	ug/kg	SW846 8260B
	Percent Moisture	14.6	0.10	% %	MCAWW 160.3 MOD
B-56-	16 11/09/01 08:45 002				•
	Tetrachloroethene	7.2	5.0	ug/kg	SW846 8260B
	Percent Moisture	12.1	0.10	8	MCAWW 160.3 MOD
B-56-	18 11/09/01 08:50 003				
	Tetrachloroethene	55	1.0	ug/L	SW846 8260B
	Trichloroethene	8.9	1.0	ug/L	SW846 8260B
B-48-3	3 11/09/01 09:20 004			<i>3,</i>	
	1,1-Dichloroethane	16	5.0	/1	GUOAS OOSOD
	Vinyl chloride	8.4	5.0	ug/kg ug/kg	SW846 8260B SW846 8260B
	Percent Moisture	17.7	0.10	49/149 %	MCAWW 160.3 MOI
D 40 1	14 11 /00 /01 00 40 005	. —	0.20	Ū	HOMW 100.5 HOL
D-46-J	14 11/09/01 09:40 005				
	Tetrachloroethene	71	5.0	ug/kg	SW846 8260B
	Trichloroethene	8.4	5.0	ug/kg	SW846 8260B
	Percent Moisture	10.1	0.10	%	MCAWW 160.3 MOD
B-48-1	8 11/09/01 09:45 006				
	1,1-Dichloroethane	4.0	2.5	/ 7	20045 0050P
	cis-1,2-Dichloroethene	14	2.5	ug/L ug/L	SW846 8260B SW846 8260B
	Tetrachloroethene	44	2.5	ug/L	SW846 8260B
	1,1,1-Trichloroethane	6.3	2.5	ug/L	SW846 8260B
	Trichloroethene	10	2.5	ug/L	SW846 8260B
B-50-4	11/09/01 10:30 007			J.	
	cis-1,2-Dichloroethene	29	12	ug/kg	SW846 8260B
	Tetrachloroethene	370	25	ug/kg	SW846 8260B
	Trichloroethene	81	25	ug/kg	SW846 8260B
	Percent Moisture	20.0	0.10	% %	MCAWW 160.3 MOD
				*	100.5 1101

D1K120137

PARAMETER		RESULT	REPORTING LIMIT	G UNITS	ANALYTICAI METHOD	
B-50-15 11/09/01 10:	:45 008					
Percent Moist	ure	14.9	0.10	8	MCAWW 160	3 MOD
B-50-18 11/09/01 10:	:50 009					
cis-1,2-Dichl	loroethene	1700	80	ug/L	SW846 8260)B
Tetrachloroet	hene	1700	80	ug/L	SW846 8260	B
1,1,1-Trichlo	roethane	340	80	ug/L	SW846 8260	B
Trichloroethe	ene	960	80	ug/L	SW846 8260	В
B-60-1 11/09/01 11:4	5 010					
Arsenic		1.9	1.0	mg/kg	SW846 6010	R
Cadmium		34.8	0.50	mg/kg	SW846 6010	_
Lead		466	0.80	mg/kg	SW846 6010	_
Barium		30.2	1.0	mg/kg	SW846 6010	
Chromium		3.3	1.0	mg/kg	SW846 6010	_
1,1-Dichloroe	thane	5.2	5.0	ug/kg	SW846 8260	
cis-1,2-Dichl	oroethene	23	2.5	ug/kg	SW846 8260	-
trans-1,2-Dic	hloroethene	6.6	2.5	ug/kg	SW846 8260	
Tetrachloroet	hene	12	5.0	ug/kg	SW846 8260	
Toluene		44	5.0	ug/kg	SW846 8260	
Trichloroethe	ne	6.9	5.0	ug/kg	SW846 8260	
Vinyl chlorid	е	9.7	5.0	ug/kg	SW846 8260	
Percent Moist	ure	24.2	0.10	% %	MCAWW 160.	_
B-60-3 11/09/01 11:5	0 011					
Arsenic		7.2	1.0	mg/kg	SW846 6010	В
Lead		10.6	0.80	mg/kg	SW846 6010	
Barium		272	1.0	mg/kg	SW846 6010	
Chromium		20.4	1.0	mg/kg	SW846 6010	
Percent Moist	ure	18.5	0.10	1119 / AG %	MCAWW 160.	
B-60-16 11/09/01 12:1	10 012					
Arsenic		1.1	1.0	mg/kg	CHOAC COLOR	,
Lead		2.3	0.80		SW846 6010F	
Barium		19.8	1.0	mg/kg mg/kg	SW846 6010E	
Chromium		2.0	1.0		SW846 6010E	
Tetrachloroeth	nene	8.8	5.0	mg/kg	SW846 6010E	
m-Xylene & p-X		3.0	2.5	ug/kg	SW846 8260E	
Percent Moistu	-	5.9	0.10	ug/kg	SW846 8260E	
		3.9	0.10	ક	MCAWW 160.3	MOD

D1K120137

	•		REPORTING		ANALY		
	PARAMETER	RESULT	LIMIT	UNITS	METHOL)	
B-54-4	11/07/01 07:40 013						
	Mercury	0.11	0.033	mg/kg	SW846	7471A	
	Silver	3.1	1.0	mg/kg	SW846	6010B	
	Arsenic	39.6	1.0	mg/kg	SW846	6010B	
	Cadmium	4.3	2.5	mg/kg	SW846	6010B	
	Lead	549	4.0	mg/kg		6010B	
	Barium	511	1.0	mg/kg		6010B	
	Chromium	207	1.0	mg/kg		6010B	
	cis-1,2-Dichloroethene	5.1	2.5	ug/kg	SW846	8260B	
	Tetrachloroethene	160	5.0	ug/kg	SW846	8260B	
	Trichloroethene	11	5.0	ug/kg	SW846	8260B	
	Percent Moisture	9.0	0.10	ફ	MCAWW	160.3	MOD
B-54-1	7 11/07/01 08:00 014						
	Arsenic	2.9	1.0	mg/kg		6010B	
	Cadmium	0.72	0.50	mg/kg		6010B	
	Lead	44.2	0.80	mg/kg		6010B	
	Barium	67.3	1.0	mg/kg		6010B	
	Chromium	22.1	1.0	mg/kg		6010B	
	Percent Moisture	8.6	0.10	%	MCAWW	160.3	MOD
B-53-5	11/07/01 08:15 015						
	Trichloroethene	200	25	ug/kg	SW846	8260B	
	Percent Moisture	20.6	0.10	%	MCAWW	160.3	MOD
B-53-1	7 11/07/01 08:45 016						
	Percent Moisture	12.3	0.10	ક	MCAWW	160.3	MOD
B-62-0	0.5 11/07/01 09:30 017						
	Mercury	0.046	0.033	mg/kg		7471A	
	Arsenic	6.8	1.0	mg/kg		6010B	
	Cadmium	21.8	0.50	mg/kg	SW846	6010B	
	Lead	142	0.80	mg/kg	SW846	6010B	
	Barium	456	1.0	mg/kg	SW846	6010B	
	Chromium	47.2	1.0	mg/kg	SW846	6010B	
	Percent Moisture	7.4	0.10	ે	MCAWW	160.3	MOD

D1K120137

PARAMETER	RESULT	REPORTI		ANALYTICAL
	KESOLI	LIMIT	<u>UNITS</u>	METHOD
B-62-5 11/07/01 09:35 018				
Arsenic	5.4	1.0	mg/kg	SW846 6010B
Lead	12.3	0.80	mg/kg	SW846 6010B
Barium	201	1.0	mg/kg	SW846 6010B
Chromium	28.8	1.0	mg/kg	SW846 6010B
Percent Moisture	16.6	0.10	%	MCAWW 160.3 MOD
B-62-17 11/07/01 09:55 019				
Arsenic	2.2	1.0	mg/kg	SW846 6010B
Lead	8.0	0.80	mg/kg	SW846 6010B
Barium	43.2	1.0	mg/kg	SW846 6010B
Chromium	11.8	1.0	mg/kg	SW846 6010B
Percent Moisture	8.2	0.10	%	MCAWW 160.3 MOD
B-61-0.5 11/07/01 10:12 020				20000 1.00
Mercury	0.12	0.033	mg/kg	SW846 7471A
Arsenic	10.1	1.0	mg/kg	SW846 7471A SW846 6010B
Cadmium	4.6	0.50	mg/kg	SW846 6010B
Lead	542	0.80	mg/kg	SW846 6010B
Barium	310	1.0	mg/kg	SW846 6010B
Chromium	65.8	1.0	mg/kg	
Percent Moisture	5.3	0.10	% %	SW846 6010B MCAWW 160.3 MOD
B-61-4 11/07/01 10:12 021				
Mercury	0.41	0.033	ma /1-a	G110.4.6. T
Arsenic	6.1	1.0	mg/kg	SW846 7471A
Cadmium	6.7	0.50	mg/kg	SW846 6010B
Lead	219	0.80	mg/kg	SW846 6010B
Barium	347	1.0	mg/kg	SW846 6010B
Chromium	33.6	1.0	mg/kg	SW846 6010B
Tetrachloroethene	32	5.0	mg/kg	SW846 6010B
Trichloroethene	6.2	5.0	ug/kg	SW846 8260B
Percent Moisture	9.2	0.10	ug/kg %	SW846 8260B MCAWW 160.3 MOD
B-61-18 11/07/01 10:40 022			v	HEAWN 100.3 MOD
Arsenic				
Lead	1.2	1.0	mg/kg	SW846 6010B
Barium	1.8	0.80	mg/kg	SW846 6010B
Chromium	15.4	1.0	mg/kg	SW846 6010B
Percent Moisture	1.1	1.0	mg/kg	SW846 6010B
rescent moisture	6.3	0.10	왐	MCAWW 160.3 MOD

D1K120137

	PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
B-70-0	.5 11/07/01 11:30 023				
	Mercury	0.31	0.033	mg/kg	SW846 7471A
	Arsenic	8.4	1.0	mg/kg	SW846 6010B
	Cadmium	3.0	0.50	mg/kg	SW846 6010B
	Lead	105	0.80	mg/kg	SW846 6010B
	Barium	168	1.0	mg/kg	SW846 6010B
	Chromium	44.7	1.0	mg/kg	SW846 6010B
	Percent Moisture	3.5	0.10	ફ	MCAWW 160.3 MOD
B-70-8	11/07/01 11:05 024				
	Mercury	0.035	0.033	mg/kg	SW846 7471A
	Arsenic	4.9	1.0	mg/kg	SW846 6010B
	Lead	26.3	0.80	mg/kg	SW846 6010B
	Barium	192	1.0	mg/kg	SW846 6010B
	Chromium	18.6	1.0	mg/kg	SW846 6010B
	Tetrachloroethene	580	25	ug/kg	SW846 8260B
	Trichloroethene	25	25	ug/kg	SW846 8260B
	Percent Moisture	18.7	0.10	ફ	MCAWW 160.3 MOD

METHODS SUMMARY

D1K120137

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals Mercury in Solid Waste (Manual Cold-Vapor) Percent Moisture Semivolatile Organic Compounds by GC/MS Trace Inductively Coupled Plasma (ICP) Metals Volatile Organics by GC/MS Volatile Organics by GC/MS	SW846 6010B SW846 7471A MCAWW 160.3 MOD SW846 8270C SW846 6010B SW846 8260B	SW846 3550B SW846 3050B SW846 5030
volacile organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

MCAWW	"Methods for Chemical Analysis of Water and Wastes",
	EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

D1K120137

ANALYTICAL METHOD	 ANALYST	ANALYST ID
MCAWW 160.3 SW846 6010B SW846 6010B SW846 7471A SW846 8260B SW846 8260B SW846 8270C	Nathan Lovstad Lynn-Anne Trudell Steve Mustain Thomas Lill Dan Appelhans Mike Armstrong Xiayasang Leewaphath	000090 006645 006720 006929 001008 002544 006600
References:		
	l Analysis of Water and Wastes", rch 1983 and subsequent revisions.	
	aluating Solid Waste, Physical/Chemio ion, November 1986 and its updates.	cal

SAMPLE SUMMARY

D1K120137

WO #	SAMPLE	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
ENQ1K	001	B-56-3	77/00/07	22.22
ENQ1X	002	B-56-16	11/09/01	
ENQ10	003	B-56-18	11/09/01	
ENQ14	004	B-48-3	11/09/01	
ENQ2C	005	B-48-14	11/09/01	
ENQ2F	006	B-48-18	11/09/01	
ENQ2K	007	B-50-4	11/09/01	
ENQ2M	008	B-50-15	11/09/01	
ENQ2P	009	B-50-18	11/09/01	
ENQ2R	010	B-60-1	11/09/01	
ENQ2T	011	B-60-3	11/09/01	
ENQ2V	012	B-60-16	11/09/01	
ENQ3J	013	B-54-4	11/09/01	
ENQ3W	014	B-54-17	11/07/01	
ENQ34	015	B-53-5	11/07/01	
ENQ4A	016	B-53-17	11/07/01	
ENQ4C	017	B-62-0.5	11/07/01	
ENQ4F	018	B-62-5	11/07/01	
ENQ4H	019	B-62-17	11/07/01	
ENQ4M	020	B-61-0.5	11/07/01	
ENQ5R	021	B-61-4	11/07/01	
ENQ51	022	B-61-18	11/07/01	
ENQ54	023	B-70-0.5	11/07/01	
ENQ59	024	B-70-8	11/07/01	
NOTE (S)		= · · · · ·	11/07/01	11:05

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Client Sample ID: B-56-3

GC/MS Volatiles

Lot-Sample #...: D1K120137-001 Work Order #...: ENQ1K1AA Matrix.....: SOLID

 Date Sampled...:
 11/09/01 08:30 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1325469 Analysis Time...:
 20:05

Dilution Factor: 1

*** Moisture....:** 15 **Method.....:** SW846 8260B

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
Bromobenzene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-56-3

Lot-Sample #: D1K120137-00:	Work Order #: ENQ1K	1AA Matrix: SOLID
-----------------------------	---------------------	-------------------

		REPORTING	G
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND ·	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	68	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			J. J
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
			3. 3
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	116	(80 - 120)
1,2-Dichloroethane-d4	117	(79 - 125)
4-Bromofluorobenzene	129	(71 - 132	
Toluene-d8	115	(77 - 117	

Client Sample ID: B-56-16

GC/MS Volatiles

Lot-Sample #...: D1K120137-002 Work Order #...: ENQ1X1AA Matrix.....: SOLID

Date Sampled...: 11/09/01 08:45 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 14:57

Dilution Factor: 1

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Bromobenzene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ИD	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-56-16

Lot-Sample #: D1K120137-002	Work Order #	: ENQ1X1AA	Matrix	: SOLID
-----------------------------	--------------	------------	--------	---------

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	7.2	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			~57 1-9
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	108	(80 - 120)	-
1,2-Dichloroethane-d4	105	(79 - 125)	
4-Bromofluorobenzene	97	(71 - 132)	
Toluene-d8	92	(77 - 117)	

Client Sample ID: B-56-18

GC/MS Volatiles

Lot-Sample #...: D1K120137-003 Work Order #...: ENQ101AA Matrix..... WATER

Date Sampled...: 11/09/01 08:50 Date Received..: 11/10/01
Prep Date....: 11/19/01 Analysis Date..: 11/19/01
Prep Batch #...: 1324476 Analysis Time..: 17:47

Dilution Factor: 1

1,2-Dichlorobenzene

Method.....: SW846 8260B

REPORTING LIMIT UNITS RESULT PARAMETER 1.0 uq/L ND 1,1,1,2-Tetrachloroethane ug/L 1.0 1,1,2,2-Tetrachloroethane ND 1.0 ug/L 55 Tetrachloroethene 1.0 ug/L ND Toluene 1.0 uq/L ND 1,2,3-Trichlorobenzene ug/L 1.0 1,2,4-Trichloro-ND benzene 1.0 uq/L ND 1,1,1-Trichloroethane 1.0 ug/L ND 1,1,2-Trichloroethane 8.9 1.0 uq/L Trichloroethene ND 1.0 ug/L 1,2,3-Trichloropropane uq/L ND 1.0 1,2,4-Trimethylbenzene uq/L 1,3,5-Trimethylbenzene ND 1.0 1.0 uq/L Vinyl chloride ND ug/L 1.0 ND o-Xylene 2.0 ug/L ND m-Xylene & p-Xylene ug/L 2.0 ND 1,2-Dibromo-3chloropropane (DBCP) ug/L ND 1.0 1,2-Dibromoethane (EDB) 1.0 ug/L ND Benzene 1.0 ug/L ND Bromobenzene 1.0 ug/L ND Bromochloromethane 1.0 ug/L Bromodichloromethane ND 1.0 ug/L ND Bromoform 2.0 ug/L ND Bromomethane ug/L ND 1.0 n-Butylbenzene uq/L sec-Butylbenzene ND 1.0 1.0 ug/L tert-Butylbenzene ND ug/L 1.0 ND Carbon tetrachloride 1.0 ug/L ND Chlorobenzene 1.0 ug/L ND Chlorodibromomethane 2.0 ug/L Chloroethane ND 1.0 ug/L ND Chloroform Chloromethane ND 2.0 ug/L 1.0 ug/L ND 2-Chlorotoluene 4-Chlorotoluene ND 1.0 ug/L ND 1.0 ug/L Dibromomethane

ND

(Continued on next page)

1.0

ug/L

Client Sample ID: B-56-18

Lot-Sample #: D1K120137-003	Work Order #:	ENQ101AA	Matrix:	WATER
-----------------------------	---------------	----------	---------	-------

PARAMETER	D.B.CTTT M	REPORTING	
1,3-Dichlorobenzene	RESULT	<u>LIMIT</u>	_ UNITS
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	101	(80 - 120)
1,2-Dichloroethane-d4	101	(72 - 127	
4-Bromofluorobenzene	104	(79 - 119	
Toluene-d8	108	(79 - 119	•

Client Sample ID: B-48-3

GC/MS Volatiles

Lot-Sample #...: D1K120137-004 Work Order #...: ENQ141AA Matrix.....: SOLID

Date Sampled...: 11/09/01 09:20 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 20:31

Dilution Factor: 1

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			_ · •
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	16	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
- -			J. J

Client Sample ID: B-48-3

Lot-Sample #: D1K120137-004	Work Order #: ENQ141AA	Matrix SOLID
-----------------------------	------------------------	--------------

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			37 5
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0 ·	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	8.4	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	114	(80 - 120	_)
1,2-Dichloroethane-d4	116	(79 - 125	
4-Bromofluorobenzene	111	(71 - 132	
Toluene-d8	99	(77 - 117)	
			•

Client Sample ID: B-48-14

GC/MS Volatiles

Lot-Sample #...: D1K120137-005 Work Order #...: ENQ2C1AA Matrix.....: SOLID

Date Sampled...: 11/09/01 09:40 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 15:49

Dilution Factor: 1

% Moisture....: 10 Method.....: SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND .	2.5	ug/kg
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-48-14

Lot-Sample #.	: D1K120137	-005 Work Order	#:	ENQ2C1AA	Matrix:	SOLID
---------------	-------------	-----------------	----	----------	---------	-------

•	•	REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	71	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			5,5
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	8.4	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	113	(80 - 120)	
1,2-Dichloroethane-d4	111	(79 - 125)	
4-Bromofluorobenzene	108	(71 - 132)	
Toluene-d8	96	(77 - 117)	

Client Sample ID: B-48-18

GC/MS Volatiles

Lot-Sample #...: D1K120137-006 Work Order #...: ENQ2F1AA Matrix.....: WATER

 Date Sampled...:
 11/09/01 09:45
 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324476
 Analysis Time...:
 18:12

Dilution Factor: 2.5

Method.....: SW846 8260B

•		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	2.5	ug/L
Bromobenzene	ND	2.5	ug/L
Bromochloromethane	ND	2.5	ug/L
Bromodichloromethane	ND	2.5	ug/L
Bromoform	ND	2.5	ug/L
Bromomethane	ND	5.0	ug/L
n-Butylbenzene	ND	2.5	ug/L
sec-Butylbenzene	ND	2.5	ug/L
tert-Butylbenzene	ND	2.5	ug/L
Carbon tetrachloride	ND	2.5	ug/L
Chlorobenzene	ND	2.5	ug/L
Chlorodibromomethane	ND	2.5	ug/L
Chloroethane	ND	5.0	ug/L
Chloroform	ND	2.5	ug/L
Chloromethane	ND	5.0	ug/L
2-Chlorotoluene	ND	2.5	ug/L
4-Chlorotoluene	ND	2.5	ug/L
Dibromomethane	ND	2.5	ug/L
1,2-Dichlorobenzene	ND	2.5	ug/L
1,3-Dichlorobenzene	ND	2.5	ug/L
1,4-Dichlorobenzene	ND	2.5	ug/L
Dichlorodifluoromethane	ND	5.0	ug/L
1,1-Dichloroethane	4.0	2.5	ug/L
1,2-Dichloroethane	ND	2.5	ug/L
1,1-Dichloroethene	ND	2.5	ug/L
cis-1,2-Dichloroethene	14	2.5	ug/L
trans-1,2-Dichloroethene	ND	1.2	ug/L
1,2-Dichloropropane	ND	2.5	ug/L
1,3-Dichloropropane	ND	2.5	ug/L
2,2-Dichloropropane	ND	12	ug/L
1,1-Dichloropropene	ND	2.5	ug/L
Ethylbenzene	ND	2.5	ug/L
Trichlorofluoromethane	ND	5.0	ug/L
Hexachlorobutadiene	ND	2.5	ug/L
Isopropylbenzene	ND	2.5	ug/L
p-Isopropyltoluene	ND	2.5	ug/Ļ
Methylene chloride	ND	2.5	ug/L
Naphthalene	ND	2.5	ug/L

Client Sample ID: B-48-18

Lot-Sample #: D1K1201	137-006 Work Order	#: ENQ2F1AA	Matrix:	WATER
-----------------------	--------------------	-------------	---------	-------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	2.5	ug/L
Styrene	ND	2.5	ug/L
1,1,1,2-Tetrachloroethane	ND	2.5	ug/L
1,1,2,2-Tetrachloroethane	ND	2.5	ug/L
Tetrachloroethene	44	2.5	ug/L
Toluene	ND	2.5	ug/L
1,2,3-Trichlorobenzene	ND	2.5	ug/L
1,2,4-Trichloro-	ND	2.5	ug/L
benzene			<u>-</u> ,
1,1,1-Trichloroethane	6.3	2.5	ug/L
1,1,2-Trichloroethane	ND	2.5	ug/L
Trichloroethene	10	2.5	ug/L
1,2,3-Trichloropropane	ND .	2.5	ug/L
1,2,4-Trimethylbenzene	ND	2.5	ug/L
1,3,5-Trimethylbenzene	ND	2.5	ug/L
Vinyl chloride	ND	2.5	ug/L
o-Xylene	ND	2.5	ug/L
m-Xylene & p-Xylene	ND	5.0	ug/L
1,2-Dibromo-3-	ND	5.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	2.5	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	101	(80 - 120)	•
1,2-Dichloroethane-d4	99	(72 - 127)	
4-Bromofluorobenzene	103	(79 - 119)	
Toluene-d8	108	(79 - 119)	

Client Sample ID: B-50-4

GC/MS Volatiles

Lot-Sample #...: D1K120137-007 Work Order #...: ENQ2K1AA Matrix.....: SOLID

Date Sampled...: 11/09/01 10:30 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 20:57

Dilution Factor: 5

% Moisture....: 20 Method.....: SW846 8260B

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
trans-1,2-Dichloroethene	ND	12	ug/kg
1,1-Dichloroethene	ND	25	ug/kg
1,2-Dichloropropane	ND	25	ug/kg
1,3-Dichloropropane	ND	25	ug/kg
2,2-Dichloropropane	ND	25	ug/kg
Benzene	ND	25	ug/kg
Bromobenzene	ND	25	ug/kg
Bromochloromethane	ND	25	ug/kg
Bromodichloromethane	ND	25	ug/kg
Bromoform	ND	25	ug/kg
Bromomethane	ND	50	ug/kg
n-Butylbenzene	ND	25	ug/kg
sec-Butylbenzene	ND	25	ug/kg
tert-Butylbenzene	ND	25	ug/kg
Carbon tetrachloride	ND	25	ug/kg
Chlorobenzene	ND	25	ug/kg
Chlorodibromomethane	ND	25	ug/kg
Chloroethane	ND ·	50	ug/kg
Chloroform	ND	50	ug/kg
Chloromethane	ND	50	ug/kg
2-Chlorotoluene	ND	25	ug/kg
4-Chlorotoluene	ND	25	ug/kg
1,2-Dibromo-3-	ND	50	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	25	ug/kg
Dibromomethane	ND	25	ug/kg
1,2-Dichlorobenzene	ND	25	ug/kg
1,3-Dichlorobenzene	ND	25	ug/kg
1,4-Dichlorobenzene	ND	25	ug/kg
Dichlorodifluoromethane	ND	50	ug/kg
1,1-Dichloroethane	ND	25	ug/kg
1,2-Dichloroethane	ND	25	ug/kg
cis-1,2-Dichloroethene	29	12	ug/kg
1,1-Dichloropropene	ND	25	ug/kg
Ethylbenzene	ND	25	ug/kg
Hexachlorobutadiene	ND	25	ug/kg
Isopropylbenzene	ND	25	ug/kg
p-Isopropyltoluene	ND	25	ug/kg

Client Sample ID: B-50-4

Lot-Sample #: D1K120137-007	Work Order #: ENQ2K1AA	Matrix SOLID
-----------------------------	------------------------	--------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	25	ug/kg
Naphthalene	ND	25	ug/kg
n-Propylbenzene	ND	25	ug/kg
Styrene	ND	25	ug/kg
1,1,1,2-Tetrachloroethane	ND	25	ug/kg
1,1,2,2-Tetrachloroethane	ND	25	ug/kg
Tetrachloroethene	370	25	ug/kg
Toluene	ND	25	ug/kg
1,2,3-Trichlorobenzene	ND	25	ug/kg
1,2,4-Trichloro-	ND	25	ug/kg
benzene			J. J
1,1,1-Trichloroethane	ND	25	ug/kg
1,1,2-Trichloroethane	ND	25	ug/kg
Trichloroethene	81	25	ug/kg
Trichlorofluoromethane	ND	50	ug/kg
1,2,3-Trichloropropane	ND	25	ug/kg
1,2,4-Trimethylbenzene	ND	25	ug/kg
1,3,5-Trimethylbenzene	ND	25	ug/kg
Vinyl chloride	ND	25	ug/kg
m-Xylene & p-Xylene	ND	12	ug/kg
o-Xylene	ND	12	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	108	(80 - 120)	•
1,2-Dichloroethane-d4	112	(79 - 125)	2
4-Bromofluorobenzene	97	(71 - 132)	
Toluene-d8	93	(77 - 117)	

Client Sample ID: B-50-15

GC/MS Volatiles

Lot-Sample #...: D1K120137-008 Work Order #...: ENQ2M1AA Matrix.....: SOLID

Date Sampled...: 11/09/01 10:45 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 16:40

Dilution Factor: 1

% Moisture....: 15 **Method.....:** SW846 8260B

REPORTING

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-50-15

Lot-Sample #: D1K120137-008	Work Order #: ENQ2M1AA	Matrix: SOLID
-----------------------------	------------------------	---------------

	•	REPORTIN	īG
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND .	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND .	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			-373
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
n-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	107	(80 - 120))
,2-Dichloroethane-d4	108	(79 - 125	
-Bromofluorobenzene	99	(71 - 132	
Coluene-d8	92	(77 - 117	

Client Sample ID: B-50-18

GC/MS Volatiles

Lot-Sample #...: D1K120137-009 Work Order #...: ENQ2P1AA Matrix...... WATER

Date Sampled...: 11/09/01 10:50 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324476 Analysis Time..: 18:37

Dilution Factor: 80

Method....: SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	80	ug/L
Bromobenzene	ND	80	ug/L
Bromochloromethane	ND	80	ug/L
Bromodichloromethane	ND	80	ug/L
Bromoform	ND	80	ug/L
Bromomethane	ND	160	ug/L
n-Butylbenzene	ND	80	ug/L
sec-Butylbenzene	ND .	80	ug/L
tert-Butylbenzene	ND	80	ug/L
Carbon tetrachloride	ND	80	ug/L
Chlorobenzene	ND	80	ug/L
Chlorodibromomethane	ND	80	ug/L
Chloroethane	ND	160	ug/L
Chloroform	ND	80	ug/L
Chloromethane	ND	160	ug/L
2-Chlorotoluene	ND	80	ug/L
4-Chlorotoluene	ND	80	ug/L
Dibromomethane	ND	80	ug/L
1,2-Dichlorobenzene	ND	80	ug/L
1,3-Dichlorobenzene	ND	80	ug/L
1,4-Dichlorobenzene	ND	80	ug/L
Dichlorodifluoromethane	ND	160	ug/L
1,1-Dichloroethane	ND	80	ug/L
1,2-Dichloroethane	ND	80	ug/L
1,1-Dichloroethene	ND	80	ug/L
cis-1,2-Dichloroethene	1700	80	ug/L
trans-1,2-Dichloroethene	ND	40	ug/L
1,2-Dichloropropane	ND	80	ug/L
1,3-Dichloropropane	ND	80	ug/L
2,2-Dichloropropane	ND	400	ug/L
1,1-Dichloropropene	ND	80	ug/L
Ethylbenzene	ND	80	ug/L
Trichlorofluoromethane	ND	160	ug/L
Hexachlorobutadiene	ND	80	ug/L
Isopropylbenzene	ND	80	ug/L
p-Isopropyltoluene	ND	80	ug/L
Methylene chloride	ND	80	ug/L
Naphthalene	ND	80	ug/L

Client Sample ID: B-50-18

Lot-Sample #: D1K120137-009	Work Order #: ENQ2P1AA	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTIN	īG
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	80	ug/L
Styrene	ND	80	ug/L
1,1,1,2-Tetrachloroethane	ND	80	ug/L
1,1,2,2-Tetrachloroethane	ND	80	ug/L
Tetrachloroethene	1700	80	ug/L
Toluene	ND	80	ug/L
1,2,3-Trichlorobenzene	ND	80	ug/L
1,2,4-Trichloro-	ND	80	ug/L
benzene			
1,1,1-Trichloroethane	340	80	ug/L
1,1,2-Trichloroethane	ND	80	ug/L
Trichloroethene	960	80	ug/L
1,2,3-Trichloropropane	ND	80	ug/L
1,2,4-Trimethylbenzene	ND	80	ug/L
1,3,5-Trimethylbenzene	ND	80	ug/L
Vinyl chloride	ND	80	ug/L
o-Xylene	ND	80	ug/L
m-Xylene & p-Xylene	ND	160	ug/L
1,2-Dibromo-3-	ND	160	ug/L
chloropropane (DBCP)			3 ,
1,2-Dibromoethane (EDB)	ND	80	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	104	(80 - 120	<u></u>
1,2-Dichloroethane-d4	104	(72 - 123	•
4-Bromofluorobenzene	103	(79 - 119	· ·
Toluene-d8	105	(79 - 119	•

Client Sample ID: B-60-1

GC/MS Volatiles

Lot-Sample #...: D1K120137-010 Work Order #...: ENQ2R1AA Matrix.....: SOLID

Date Sampled...: 11/09/01 11:45 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 21:24

Dilution Factor: 1

% Moisture....: 24 Method.....: SW846 8260B

		REPORTIN	īG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
3romochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
3romoform	ND	5.0	ug/kg
3romomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
ert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
-Chlorotoluene	ND	5.0	ug/kg
-Chlorotoluene	ND	5.0	ug/kg
.,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
.,2-Dichlorobenzene	ND	5.0	ug/kg
.,3-Dichlorobenzene	ND	5.0	ug/kg
.,4-Dichlorobenzene	ND	5.0	ug/kg
ichlorodifluoromethane	ND	10	ug/kg
,1-Dichloroethane	5.2	5.0	ug/kg
,2-Dichloroethane	ND	5.0	ug/kg
is-1,2-Dichloroethene	23	2.5	ug/kg
rans-1,2-Dichloroethene	6.6	2.5	ug/kg
,1-Dichloroethene	ND	5.0	ug/kg
,2-Dichloropropane	ND	5.0	ug/kg
,3-Dichloropropane	ND	5.0	ug/kg
,2-Dichloropropane	ND	5.0	ug/kg
,1-Dichloropropene	ND	5.0	ug/kg
thylbenzene	ND	5.0	ug/kg
exachlorobutadiene	ND	5.0	ug/kg
sopropylbenzene	3770		/•
sopropythenzene	ND	5.0	ug/kg

Client Sample ID: B-60-1

Lot-Sample #: D1K120137-010	Work Order #: ENQ2R1AA	Matrix: SOLID
-----------------------------	------------------------	---------------

		REPORTING	;
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	12	5.0	ug/kg
Toluene	44	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			5. 5
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	6.9	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	9.7	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
			5. 5
•	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	108	(80 - 120)	-
1,2-Dichloroethane-d4	112	(79 - 125)	
4-Bromofluorobenzene	115	(71 - 132)	
Toluene-d8	98	(77 - 117)	

Client Sample ID: B-60-3

GC/MS Volatiles

Lot-Sample #...: D1K120137-011 Work Order #...: ENQ2T1AA Matrix.....: SOLID

Date Sampled...: 11/09/01 11:50 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 17:30

Dilution Factor: 1

% Moisture....: 18 **Method.....:** SW846 8260B

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND ·	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5 . 0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-60-3

Lot-Sample #: D1K	120137-011 Work Ord	r #: ENQ2T1A	A Matrix:	SOLID
-------------------	---------------------	--------------	-----------	-------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			3. 3
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	106	(80 - 120)	•
1,2-Dichloroethane-d4	104	(79 - 125)	
4-Bromofluorobenzene	98	(71 - 132)	
Toluene-d8	92	(77 - 117)	

Client Sample ID: B-60-16

GC/MS Volatiles

Lot-Sample #...: D1K120137-012 Work Order #...: ENQ2V1AA Matrix.....: SOLID

Date Sampled...: 11/09/01 12:10 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 17:55

Dilution Factor: 1

% Moisture....: 5.9 **Method.....:** SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-60-16

Lot-Sample #:	D1K120137-012	Work Order	#: ENQ2V1AA	Matrix:	SOLID
---------------	---------------	------------	-------------	---------	-------

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	8.8	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			<u> </u>
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	3.0	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	104	(80 - 120)
1,2-Dichloroethane-d4	107	(79 - 125)
4-Bromofluorobenzene	103	(71 - 132)
Toluene-d8	94	(77 - 117)

Client Sample ID: B-54-4

GC/MS Volatiles

Lot-Sample #...: D1K120137-013 Work Order #...: ENQ3J1AA Matrix.....: SOLID

Date Sampled...: 11/07/01 07:40 Date Received..: 11/10/01 Prep Date....: 11/17/01 Analysis Date..: 11/18/01 Prep Batch #...: 1322127 Analysis Time..: 02:36

Dilution Factor: 1

% Moisture....: 9.0 **Method.....:** SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND .	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	5.1	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-54-4

Lot-Sample #:	D1K120137-013	Work Order	#:	ENQ3J1AA	Matrix:	SOLID
---------------	---------------	------------	----	----------	---------	-------

		REPORTIN	1G
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kq
Tetrachloroethene	160	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			373
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	11	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	103	(80 - 120	0)
1,2-Dichloroethane-d4	107	(79 - 12	
4-Bromofluorobenzene	121	(71 - 132	
Toluene-d8	98	(77 - 11	•

Client Sample ID: B-54-17

GC/MS Volatiles

Lot-Sample #...: D1K120137-014 Work Order #...: ENQ3W1AA Matrix...... SOLID

 Date Sampled...:
 11/07/01 08:00 Date Received...:
 11/10/01

 Prep Date.....:
 11/17/01 Analysis Date...:
 11/18/01

 Prep Batch #...:
 1322127 Analysis Time...:
 03:02

Dilution Factor: 1

% Moisture....: 8.6 **Method.....:** SW846 8260B

		REPORTI	I G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

3

Client Sample ID: B-54-17

Lot-Sample #	: D1K120137-014	Work Order #	ŧ:	ENQ3W1AA	Matrix:	SOLID
--------------	-----------------	--------------	----	----------	---------	-------

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			.
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	105	(80 - 120	
1,2-Dichloroethane-d4	109	(79 - 125	
4-Bromofluorobenzene	100	(71 - 132	
Toluene-d8	91	(77 - 117	

Client Sample ID: B-53-5

GC/MS Volatiles

Lot-Sample #...: D1K120137-015 Work Order #...: ENQ341AA Matrix.....: SOLID

Date Sampled...: 11/07/01 08:15 Date Received..: 11/10/01 Prep Date....: 11/18/01 Analysis Date..: 11/18/01 Prep Batch #...: 1325441 Analysis Time..: 12:37

Dilution Factor: 5

% Moisture....: 21 **Method.....:** SW846 8260B

		REPORTING	}
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	25	ug/kg
Bromobenzene	ND	25	ug/kg
Bromochloromethane	ND	25	ug/kg
Bromodichloromethane	ND	25	ug/kg
Bromoform	ND	25	ug/kg
Bromomethane	ND	50	ug/kg
n-Butylbenzene	ND	25	ug/kg
sec-Butylbenzene	ND	25	ug/kg
tert-Butylbenzene	ND	25	ug/kg
Carbon tetrachloride	ND	25	ug/kg
Chlorobenzene	ND	25	ug/kg
Chlorodibromomethane	ND	25	ug/kg
Chloroethane	ND	50	ug/kg
Chloroform	ND	50	ug/kg
Chloromethane	ND	50	ug/kg
2-Chlorotoluene	ND	25	ug/kg
4-Chlorotoluene	ND	25	ug/kg
1,2-Dibromo-3-	ND	50	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	25	ug/kg
Dibromomethane	ND	25	ug/kg
1,2-Dichlorobenzene	ND	25	ug/kg
1,3-Dichlorobenzene	ND	25	ug/kg
1,4-Dichlorobenzene	ND	25	ug/kg
Dichlorodifluoromethane	ND	50	ug/kg
1,1-Dichloroethane	ND	25	ug/kg
1,2-Dichloroethane	ND	25	ug/kg
cis-1,2-Dichloroethene	ND	12	ug/kg
trans-1,2-Dichloroethene	ND	12	ug/kg
1,1-Dichloroethene	ND	25	ug/kg
1,2-Dichloropropane	ND	25	ug/kg
1,3-Dichloropropane	ND	25	ug/kg
2,2-Dichloropropane	ND	25	ug/kg
1,1-Dichloropropene	ND	25	ug/kg
Ethylbenzene	ND	25	ug/kg
Hexachlorobutadiene	ND	25	ug/kg
Isopropylbenzene	ND	25	ug/kg
p-Isopropyltoluene	ИĎ	25	ug/kg

Client Sample ID: B-53-5

Lot-Sample #	ŧ:	D1K120137-015	Work Order	#:	ENQ341AA	Matrix:	SOLID
--------------	----	---------------	------------	----	----------	---------	-------

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	25	ug/kg
Naphthalene	ND	25	ug/kg
n-Propylbenzene	ND	25	ug/kg
Styrene	ND	25	ug/kg
1,1,1,2-Tetrachloroethane	ND	25	ug/kg
1,1,2,2-Tetrachloroethane	ND	. 25	ug/kg
Tetrachloroethene	ND	25	ug/kg
Toluene	ND	25	ug/kg
1,2,3-Trichlorobenzene	ND	25	ug/kg
1,2,4-Trichloro-	ND	25	ug/kg
benzene			
1,1,1-Trichloroethane	ND	25	ug/kg
1,1,2-Trichloroethane	ND	25	ug/kg
Trichloroethene	200	25	ug/kg
Trichlorofluoromethane	ND	50	ug/kg
1,2,3-Trichloropropane	ND	25	ug/kg
1,2,4-Trimethylbenzene	ND	25	ug/kg
1,3,5-Trimethylbenzene	ND	25	ug/kg
Vinyl chloride	ND	25	ug/kg
m-Xylene & p-Xylene	ND	12	ug/kg
o-Xylene	ND	12	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	_
Dibromofluoromethane	105	(80 - 120)
1,2-Dichloroethane-d4	103	(79 - 125)
4-Bromofluorobenzene	103	(71 - 132)
Toluene-d8	95	(77 - 117)

Client Sample ID: B-53-17

GC/MS Volatiles

Lot-Sample #...: D1K120137-016 Work Order #...: ENQ4A1AA Matrix...... SOLID

Date Sampled...: 11/07/01 08:45 Date Received..: 11/10/01 Prep Date....: 11/17/01 Analysis Date..: 11/18/01 Prep Batch #...: 1322127 Analysis Time..: 03:55

Dilution Factor: 1

% Moisture....: 12 **Method.....:** SW846 8260B

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND .	10	ug/kg
Benzene	ND	5.0	uġ/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-53-17

Lot-Sample #: D1K120137-016	Work Order #: ENQ4A1AA	Matrix: SOLID
-----------------------------	------------------------	---------------

		REPORTIN	1G
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			3/ 1-3
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	112	(80 - 120	 O)
1,2-Dichloroethane-d4	117	(79 - 125	
4-Bromofluorobenzene	106	(71 - 132	
Toluene-d8	96	(77 - 113	

Client Sample ID: B-62-0.5

GC/MS Volatiles

Lot-Sample #...: D1K120137-017 Work Order #...: ENQ4C1AA Matrix.....: SOLID

 Date Sampled...:
 11/07/01 09:30 Date Received...
 11/10/01

 Prep Date.....:
 11/17/01 Analysis Date...
 11/18/01

 Prep Batch #...:
 1322127 Analysis Time...
 04:22

Dilution Factor: 1

*** Moisture....:** 7.4 **Method.....:** SW846 8260B

		REPORTIN	rG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-62-0.5

Lot-Sample #: D1K120137-017	Work Order #: ENQ4C1AA	Matrix SOLID
-----------------------------	------------------------	--------------

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	_
Dibromofluoromethane	112	(80 - 120)
1,2-Dichloroethane-d4	119	(79 - 125	i)
4-Bromofluorobenzene	126	(71 - 132)
Toluene-d8	103	(77 - 117	·)

Client Sample ID: B-62-5

GC/MS Volatiles

Lot-Sample #...: D1K120137-018 Work Order #...: ENQ4F1AA Matrix.....: SOLID

Date Sampled...: 11/07/01 09:35 Date Received..: 11/10/01 Prep Date....: 11/17/01 Analysis Date..: 11/18/01 Prep Batch #...: 1322127 Analysis Time..: 04:48

Dilution Factor: 1

% Moisture....: 17 Method.....: SW846 8260B

		REPORTI	1G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
ert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
-Chlorotoluene	ND	5.0	ug/kg
-Chlorotoluene	ND	5.0	ug/kg
,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)	,		5, 1-5
,2-Dibromoethane (EDB)	ND	5.0	ug/kg
ibromomethane	ND	5.0	ug/kg
,2-Dichlorobenzene	ND	5.0	ug/kg
,3-Dichlorobenzene	ND	5.0	ug/kg
,4-Dichlorobenzene	ND	5.0	ug/kg
ichlorodifluoromethane	ND	10	ug/kg
,1-Dichloroethane	ND	5.0	ug/kg
,2-Dichloroethane	ND	5.0	ug/kg
is-1,2-Dichloroethene	ND	2.5	ug/kg
rans-1,2-Dichloroethene	ND	2.5	ug/kg
,1-Dichloroethene	ND	5.0	ug/kg
,2-Dichloropropane	ND	5.0	ug/kg
,3-Dichloropropane	ND	5.0	ug/kg
,2-Dichloropropane	ND	5.0	ug/kg
,1-Dichloropropene	ND	5.0	ug/kg
thylbenzene	ND	5.0	ug/kg
exachlorobutadiene	ND	5.0	ug/kg
sopropylbenzene	ND	5.0	ug/kg

Client Sample ID: B-62-5

Lot-Sample #: D1K120137	7-018 Work Order	#: ENQ4F1AA	Matrix:	SOLID
-------------------------	------------------	-------------	---------	-------

		REPORTING	G
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	107	(80 - 120)
1,2-Dichloroethane-d4	114	(79 - 125	
4-Bromofluorobenzene	98	(71 - 132	2)
Toluene-d8	93	(77 - 117	7)

Client Sample ID: B-62-17

GC/MS Volatiles

Lot-Sample #...: D1K120137-019 Work Order #...: ENQ4H1AA Matrix.....: SOLID

Date Sampled...: 11/07/01 09:55 Date Received..: 11/10/01 Prep Date....: 11/18/01 Analysis Date..: 11/18/01 Prep Batch #...: 1325441 Analysis Time..: 13:03

Dilution Factor: 1

% Moisture....: 8.2 Method.....: SW846 8260B

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-62-17

Lot-Sample #:	D1K120137-019	Work Order	#: ENQ4H1AA	Matrix:	SOLID
---------------	---------------	------------	-------------	---------	-------

		REPORTIN	r G
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND .	5.0	ug/kg
Styrene	ND .	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	104	(80 - 12	0)
1,2-Dichloroethane-d4	104	(79 - 12	5)
4-Bromofluorobenzene	97	(71 - 13	2)
Toluene-d8	90	(77 - 11	7)

Client Sample ID: B-61-0.5

GC/MS Volatiles

Lot-Sample #...: D1K120137-020 Work Order #...: ENQ4M1AA Matrix...... SOLID

Date Sampled...: 11/07/01 10:12 Date Received..: 11/10/01 Prep Date....: 11/18/01 Analysis Date..: 11/18/01 Prep Batch #...: 1325441 Analysis Time..: 14:21

Dilution Factor: 1

% Moisture....: 5.3 Method.....: SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			3. 3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Ethylbenzene			- -
Hexachlorobutadiene	ND	5.0	μα/κα
	ND ND	5.0 5.0	ug/kg ug/ka
Isopropylbenzene p-Isopropyltoluene			ug/kg ug/kg ug/kg

Client Sample ID: B-61-0.5

Lot-Sample #: D1K120137-020	Work Order #: ENQ4M1AA	Matrix SOLID
-----------------------------	------------------------	--------------

		REPORTIN	G
PARAMETER	RESULT	LIMIT_	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND .	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			~3/ ~ 3
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg ug/kg
o-Xylene	ND	2.5	
	· -	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	110	(80 - 120	<u> </u>
l,2-Dichloroethane-d4	110	(79 - 125	
l-Bromofluorobenzene	123	(71 - 132	
Foluene-d8	100	(77 - 117	
			,

Client Sample ID: B-61-4

GC/MS Volatiles

Lot-Sample #...: D1K120137-021 Work Order #...: ENQ5R1AA Matrix.....: SOLID

Date Sampled...: 11/07/01 10:12 Date Received..: 11/10/01 Prep Date....: 11/18/01 Analysis Date..: 11/18/01 Prep Batch #...: 1325441 Analysis Time..: 14:47

Dilution Factor: 1

% Moisture....: 9.2 **Method.....:** SW846 8260B

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-61-4

Lot-Sample :	#:	D1K120137-021	Work Order	#: ENQ5R1AA	Matrix:	: SOLID
--------------	----	---------------	------------	-------------	---------	---------

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	32	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND .	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND .	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	6.2	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	_
Dibromofluoromethane	112	(80 - 120)
1,2-Dichloroethane-d4	118	(79 - 125)
4-Bromofluorobenzene	122	(71 - 132)
Toluene-d8	103	(77 - 117)

Client Sample ID: B-61-18

GC/MS Volatiles

Lot-Sample #...: D1K120137-022 Work Order #...: ENQ511AA Matrix......: SOLID

Date Sampled...: 11/07/01 10:40 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 12:44

Dilution Factor: 1

% Moisture....: 6.3 **Method.....:** SW846 8260B

		REPORTIN	īG
PARAMETER	RESULT	LIMIT	UNITS
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			5. 5
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg

Client Sample ID: B-61-18

Lot-Sample #: D1K120137-02	Work Order #: ENQ511AA	Matrix: SOLID
----------------------------	------------------------	---------------

		REPORTIN	īG
PARAMETER	RESULT	LIMIT	UNITS
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND ·	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND .	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	103	(80 - 12	0)
1,2-Dichloroethane-d4	99	(79 - 12	5)
4-Bromofluorobenzene	97	(71 - 13	2)
Toluene-d8	88	(77 - 11	7)

Client Sample ID: B-70-8

GC/MS Volatiles

Lot-Sample #...: D1K120137-024 Work Order #...: ENQ591AA Matrix.....: SOLID

 Date
 Sampled...:
 11/07/01
 11:05
 Date Received...:
 11/10/01

 Prep
 Date....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep
 Batch #...:
 1325469
 Analysis Time...:
 14:05

Dilution Factor: 5

% Moisture....: 19 Method....: SW846 8260B

PARAMETER		REPORTI	
1,2-Dibromo-3-	RESULT	LIMIT	UNITS
chloropropane (DBCP)	ND	50	ug/kg
1,2-Dibromoethane (EDB)			
Dibromomethane (EDB)	ND	25	ug/kg
1,2-Dichlorobenzene	ND	25	ug/kg
1,3-Dichlorobenzene	ND	25	ug/kg
1,4-Dichlorobenzene	ND	25	ug/kg
Dichlorodifluoromethane	ND	25	ug/kg
1,1-Dichloroethane	ND	50	ug/kg
-	ND	25	ug/kg
1,2-Dichloroethane	ND	25	ug/kg
cis-1,2-Dichloroethene	ND	12	ug/kg
trans-1,2-Dichloroethene	ND	12	ug/kg
1,1-Dichloroethene	ND	25	ug/kg
1,2-Dichloropropane	ND	25	ug/kg
1,3-Dichloropropane	ND	25	ug/kg
2,2-Dichloropropane	ND	25	ug/kg
1,1-Dichloropropene	ND	25	ug/kg
Ethylbenzene	ND	25	ug/kg
Hexachlorobutadiene	ND	25	ug/kg
Isopropylbenzene	ND	25	ug/kg
p-Isopropyltoluene	ND	25	ug/kg
Methylene chloride	ND	25	ug/kg
Naphthalene	ND	25	ug/kg
n-Propylbenzene	ND	25	ug/kg
Styrene	ND	25	ug/kg
1,1,1,2-Tetrachloroethane	ND	25	ug/kg
1,1,2,2-Tetrachloroethane	ND	25	ug/kg
Tetrachloroethene	580	25	ug/kg
Bromomethane	ND	50	ug/kg
n-Butylbenzene	ND	25	ug/kg
sec-Butylbenzene	ND	25	ug/kg
tert-Butylbenzene	ND	25	ug/kg
Carbon tetrachloride	ND	25	ug/kg
Chlorobenzene	ND	25	ug/kg
Toluene	ND	25	ug/kg
1,2,3-Trichlorobenzene	ND	25	ug/kg
Chlorodibromomethane	ND	25	ug/kg
Chloroethane	ND	50	ug/kg
			~3/ 1.5

Client Sample ID: B-70-8

Lot-Sample #: D1K120137-024	Work Order #: ENQ591AA	Matrix SOLID
-----------------------------	------------------------	--------------

		REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
Chloroform	ND	50	ug/kg
1,2,4-Trichloro-	ND	25	ug/kg
benzene	. *		J. J
1,1,1-Trichloroethane	ND	25	ug/kg
1,1,2-Trichloroethane	ND	25	ug/kg
Trichloroethene	25	25	ug/kg
Trichlorofluoromethane	ND	50	ug/kg
1,2,3-Trichloropropane	ND	25	ug/kg
1,2,4-Trimethylbenzene	ND	25	ug/kg
1,3,5-Trimethylbenzene	ND	25	ug/kg
Vinyl chloride	ND	25	ug/kg
Chloromethane	ND	50	ug/kg
2-Chlorotoluene .	ND	25	ug/kg
4-Chlorotoluene	ND	25	ug/kg
m-Xylene & p-Xylene	ND	12	ug/kg
o-Xylene	ND	12	ug/kg
Benzene	ND	25	ug/kg
Bromobenzene	ND	25	ug/kg
Bromochloromethane	ND	25	ug/kg
Bromodichloromethane	ND	25	ug/kg
Bromoform	ND	25	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	113	(80 - 12	0)
1,2-Dichloroethane-d4	109	(79 - 12	
4-Bromofluorobenzene	110	(71 - 13	
Toluene-d8	97	(77 - 11	

Client Sample ID: B-48-3

GC/MS Semivolatiles

Lot-Sample #...: D1K120137-004 Work Order #...: ENQ141AN Matrix....: SOLID

Date Sampled...: 11/09/01 09:20 Date Received..: 11/10/01 Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Analysis Time..: 17:41 Prep Batch #...: 1325202

Dilution Factor: 1

% Moisture....: 18 Method.....: SW846 8270C

REP	ORT	'ING

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	MDL
Acenaphthene	ND	330	ug/kg	46
Acenaphthylene	ND	330	ug/kg	34
Anthracene	ND	330	ug/kg	78
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(b) fluoranthene	ND	330	ug/kg	100
Benzo(k)fluoranthene	ND	330	ug/kg	93
Benzo(ghi)perylene	ND	330	ug/kg	70
Benzo(a)pyrene	ND	330	ug/kg	94
Chrysene	ND	330	ug/kg	53
Dibenz(a,h)anthracene	ND	330	ug/kg	47
Fluoranthene	ND	330	ug/kg	84
Fluorene	ND	330	ug/kg	76
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	48
Naphthalene	ND	330	ug/kg	70
Phenanthrene	ND	330	ug/kg	37
Pyrene	ND	330	ug/kg	40
<pre>bis(2-Ethylhexyl) phthalate</pre>	ND	330	ug/kg	69
Dimethyl phthalate	ND	330	ug/kg	85
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
2-Fluorophenol	69	(34 - 97		
Phenol-d5	68	(39 - 90)	
Nitrobenzene-d5	71	(33 - 97)	
2-Fluorobiphenyl	68	(39 - 91)	
2,4,6-Tribromophenol	75	(29 - 95)	
Terphenyl-d14	67	(30 - 102	2)	

Client Sample ID: B-48-14

GC/MS Semivolatiles

Lot-Sample #...: D1K120137-005 Work Order #...: ENQ2C1AN Matrix...... SOLID

 Date Sampled...:
 11/09/01 09:40 Date Received...:
 11/10/01

 Prep Date.....:
 11/21/01 Analysis Date...:
 11/25/01

 Prep Batch #...:
 1325202 Analysis Time...:
 18:50

Dilution Factor: 1

% Moisture....: 10 **Method.....:** SW846 8270C

		REPORTIN	1G		
PARAMETER	RESULT	LIMIT	UNITS	MDL	
Acenaphthene	ND	330	ug/kg	46	
Acenaphthylene	ND	330	ug/kg	34	
Anthracene	ND	330	ug/kg	78	
Benzo(a)anthracene	ND	330	ug/kg	39	
Benzo(b) fluoranthene	ND	330	ug/kg	100	
Benzo(k)fluoranthene	ND	330	ug/kg	93	
Benzo(ghi)perylene	ND	330	ug/kg	70	
Benzo(a)pyrene	ND	330	ug/kg	94	
Chrysene	ND	330	ug/kg	53	
Dibenz(a,h)anthracene	ND	330	ug/kg	47	
Fluoranthene	ND	330	ug/kg	84	
Fluorene	ND	330	ug/kg	76	
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	48	
Naphthalene	ND	330	ug/kg	70	
Phenanthrene	ND	330	ug/kg	37	
Pyrene	ND	330	ug/kg	40	
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	69	
Dimethyl phthalate	ND	330	ug/kg	85	
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
2-Fluorophenol	67	(34 - 97	<u> </u>		
Phenol-d5	63	(39 - 90)		
Nitrobenzene-d5	68	(33 - 97)		
2-Fluorobiphenyl	64	(39 - 91)		
2,4,6-Tribromophenol	58	(29 - 95)		
Terphenyl-d14	71	(30 - 10	2)		

Client Sample ID: B-50-4

GC/MS Semivolatiles

Lot-Sample #:	D1K120137-007	Work Order	#: ENQ2K1AN	Matrix:	SOLID
---------------	---------------	------------	-------------	---------	-------

Date Sampled...: 11/09/01 10:30 Date Received..: 11/10/01 Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Prep Batch #...: 1325202 Analysis Time..: 19:13

Dilution Factor: 1

% Moisture....: 20 **Method.....:** SW846 8270C

		REPORTIN	1G		
PARAMETER	RESULT	LIMIT	UNITS	MDL	
Acenaphthene	ND	330	ug/kg	46	
Acenaphthylene	ND	330	ug/kg	34	
Anthracene	ND	330	ug/kg	78	
Benzo(a)anthracene	ND	330	ug/kg	39	
Benzo(b)fluoranthene	ND	330	ug/kg	100	
Benzo(k)fluoranthene	ND	330	ug/kg	93	
Benzo(ghi)perylene	ND	330	ug/kg	70	
Benzo(a)pyrene	ND	330	ug/kg	94	
Chrysene	ND	330	ug/kg	53	
Dibenz(a,h)anthracene	ND	330	ug/kg	47	
Fluoranthene	ND	330	ug/kg	84	
Fluorene	ND	330	ug/kg	76	
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	48	
Naphthalene	ND	330	ug/kg	70	
Phenanthrene	ND	330	ug/kg	37	
Pyrene	ND	330	ug/kg	40	
<pre>bis(2-Ethylhexyl) phthalate</pre>	ND	330	ug/kg	69	
Dimethyl phthalate	ND	330	ug/kg	85	
	PERCENT	RECOVERY	•		
SURROGATE	RECOVERY	LIMITS			
2-Fluorophenol	74	(34 - 97)		
Phenol-d5	70	(39 - 90)		
Nitrobenzene-d5	73	(33 - 97)		
2-Fluorobiphenyl	70	(39 - 91	.)		
2,4,6-Tribromophenol	65	(29 - 95)		
Terphenyl-d14	81	(30 - 10	2)		

Client Sample ID: B-50-15

GC/MS Semivolatiles

Lot-Sample #...: D1K120137-008 Work Order #...: ENQ2M1AN Matrix.....: SOLID

 Date Sampled...:
 11/09/01 10:45
 Date Received...:
 11/10/01

 Prep Date.....:
 11/21/01
 Analysis Date...:
 11/25/01

 Prep Batch #...:
 1325202
 Analysis Time...:
 19:36

Dilution Factor: 1

% Moisture....: 15 **Method.....:** SW846 8270C

RE	PC	RT	TN	E)

		KEPORIIN	4G	
PARAMETER	RESULT	LIMIT	UNITS	MDL
Acenaphthene	ND	330	ug/kg	46
Acenaphthylene	ND	330	ug/kg	34
Anthracene	ND	330	ug/kg	78
Benzo(a) anthracene	ND	330	ug/kg	39
Benzo(b) fluoranthene	ND	330	ug/kg	100
Benzo(k) fluoranthene	ND	330	ug/kg	93
Benzo(ghi)perylene	ND	330	ug/kg	70
Benzo(a)pyrene	ND	330	ug/kg	94
Chrysene	ND	330	ug/kg	53
Dibenz(a,h)anthracene	ND	330	ug/kg	47
Fluoranthene	ND	330	ug/kg	84
Fluorene	ND	330	ug/kg	76
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	48
Naphthalene	ND	330	ug/kg	70
Phenanthrene	ND	330	ug/kg	37
Pyrene	ND .	330	ug/kg	40
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	69
Dimethyl phthalate	ND	330	ug/kg	85
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
2-Fluorophenol	70	(34 - 97		
Phenol-d5	66	(39 - 90)	
Nitrobenzene-d5	70	(33 - 97)	
2-Fluorobiphenyl	67	(39 - 91)	
2,4,6-Tribromophenol	57	(29 - 95		
Terphenyl-d14	74	(30 - 10	2)	

Client Sample ID: B-60-1

TOTAL Metals

Lot-Sample #...: D1K120137-010 Matrix....: SOLID

Date Sampled...: 11/09/01 11:45 Date Received..: 11/10/01

% Moisture....: 24

e roiscuic	24					
		REPORTI	NG		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #.	- 1317293		•			
Mercury	ND	0.033	mg/kg	SW846 7471A	11/16/01	ENQ2R1AK
		Dilution Fac		Analysis Time: 21:4:	• •	
Prep Batch #.	: 1319456					
Silver	ND	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2R1AE
		Dilution Fac	ctor: 1	Analysis Time: 14:45	3	
Arsenic	1.9	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2R1AF
		Dilution Fac		Analysis Time: 14:45	5	
Barium	30.2	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2R1AC
		Dilution Fac	ctor: 1	Analysis Time: 14:45	3	
Cadmium	34.8	0.50	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2R
		Dilution Fac		Analysis Time: 14:45		
Chromium	3.3	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2R1AD
		Dilution Fac		Analysis Time: 14:45	3	
Lead	466	0.80	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2R1AH
		Dilution Fac	ctor: 1	Analysis Time: 14:45	;	
Selenium	ND	1.3	mg/kg	SW846 6010B	11/20-11/21/01	ENO2R1AJ
		Dilution Fac	• -	Analysis Time: 14:45	•	-

Client Sample ID: B-60-3

TOTAL Metals

Lot-Sample #...: D1K120137-011 Matrix.....: SOLID

Date Sampled...: 11/09/01 11:50 Date Received..: 11/10/01

% Moisture....: 18

PARAMETER	RESULT	REPORTIN LIMIT	IG UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #.	- 1217202					
Mercury	ND	0.033	mg/kg	SW846 7471A	11/16/01	ENO2T1AK
		Dilution Fac		Analysis Time: 21:43	11,10,01	DNQZIIAK
Prep Batch #.	: 1319456					
Silver	ND	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2T1AE
		Dilution Fac	tor: 1	Analysis Time: 15:02		
Arsenic	7.2	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2T1AF
		Dilution Fac	tor: 1	Analysis Time: 15:02		
Barium	272	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2T1AC
		Dilution Fac	tor: 1	Analysis Time: 15:02		
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2T1AG
		Dilution Fac	tor: 1	Analysis Time: 15:02		
Chromium	20.4	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2T1AD
		Dilution Fact	tor: 1	Analysis Time: 15:02		
Lead	10.6	0.80	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2T1AH
		Dilution Fact	tor: 1	Analysis Time: 15:02		
Selenium	ND	1.3	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2T1AJ
		Dilution Fact	or: 1	Analysis Time: 15:02		

Client Sample ID: B-60-16

TOTAL Metals

Lot-Sample #...: D1K120137-012 Matrix....: SOLID

Date Sampled...: 11/09/01 12:10 Date Received..: 11/10/01

% Moisture....: 5.9

		REPORTII	1G		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #.	: 1317293			,		
Mercury	ND	0.033	mg/kg	SW846 7471A	11/16/01	ENQ2V1AK
		Dilution Fac	etor: 1	Analysis Time: 21:45	, ,	~
Prep Batch #.	: 1319456		•			
Silver	ND	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2V1AE
	•	Dilution Fac	tor: 1	Analysis Time: 15:07		
Arsenic	1.1	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2V1AF
		Dilution Fac	tor: 1	Analysis Time: 15:07		
Barium	19.8	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2V1AC
		Dilution Fac	tor: 1	Analysis Time: 15:07		
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2V1AG
•		Dilution Fac	tor: 1	Analysis Time: 15:07		
Chromium	2.0	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2VLAD
		Dilution Fac	tor: 1	Analysis Time: 15:07		
Lead	2.3	0.80	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2V1AH
		Dilution Fac	tor: 1	Analysis Time: 15:07		
Selenium	ND	1.3	mg/kg	SW846 6010B	11/20-11/21/01	ENQ2V1AJ
		Dilution Fac	tor: 1	Analysis Time: 15:07		

Client Sample ID: B-54-4

TOTAL Metals

Lot-Sample #:	D1K120137-013	Matrix SOLID

Date Sampled...: 11/07/01 07:40 Date Received..: 11/10/01

% Moisture....: 9.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch # Mercury	.: 1317293 0.11	0.033 Dilution Fact	mg/kg or: 1	SW846 7471A Analysis Time: 2	11/16/01 1:46	ENQ3J1AK
Prep Batch # Silver	.: 1319456 3.1	1.0 Dilution Fact	mg/kg or: 1	SW846 6010B Analysis Time: 19	11/20-11/21/01 5:11	ENQ3J1AE
Arsenic	39.6	1.0 Dilution Fact	mg/kg or: 1	SW846 6010B Analysis Time: 19	11/20-11/21/01	ENQ3J1AF
Barium	511	1.0 Dilution Fact	mg/kg or: 1	SW846 6010B Analysis Time: 15	11/20-11/21/01	ENQ3J1AC
Cadmium	4.3	2.5 Dilution Fact	mg/kg or: 5	SW846 6010B Analysis Time: 11	11/20-11/27/01	ENQ3J23G
Chromium	207	1.0 Dilution Fact	mg/kg or: 1	SW846 6010B Analysis Time: 15	11/20-11/21/01	ENQ3J1AD
Lead	549	4.0 Dilution Fact	mg/kg or: 5	SW846 6010B Analysis Time: 11	11/20-11/27/01	ENQ3J1AH
Selenium	ND	1.3 Dilution Factor	mg/kg or: 1	SW846 6010B Analysis Time: 15	11/20-11/21/01	ENQ3J1AJ

Client Sample ID: B-54-17

TOTAL Metals

Lot-Sample #...: D1K120137-014 Matrix....: SOLID

Date Sampled...: 11/07/01 08:00 Date Received..: 11/10/01

% Moisture....: 8.6

		25222				
		REPORTI	- · · -		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	: 1317293					
Mercury	ND	0.033	mg/kg	SW846 7471A	11/16/01	ENQ3W1AK
		Dilution Fac	ctor: 1	Analysis Time: 21:48		
Prep Batch #	: 1319456					
Silver	ND	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENO3W1AE
		Dilution Fac		Analysis Time: 15:15	·	~-·· ~ -··
				•		
Arsenic	2.9	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENO3W1AF
		Dilution Fac	ctor: 1	Analysis Time: 15:15		_
				-		
Barium	67.3	1.0	mg/kg	SW846 6010B	11/20-11/21/01	EN03W1AC
		Dilution Fac	ctor: 1	Analysis Time: 15:15	•	- · · · · · ·
				-		
Cadmium	0.72	0.50	mg/kg	SW846 6010B	11/20-11/21/01	ENQ3W1AG
		Dilution Fac	tor: 1	Analysis Time: 15:15		
Chromium	22.1	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ3W1AD
		Dilution Fac	tor: 1	Analysis Time: 15:15		
Lead	44.2	0.80	mg/kg	SW846 6010B	11/20-11/21/01	ENQ3W1AH
		Dilution Fac	tor: 1	Analysis Time: 15:15		
Selenium	ND	1.3	mg/kg	SW846 6010B	11/20-11/21/01	ENQ3W1AJ
		Dilution Fac	tor: 1	Analysis Time: 15:15		·-

Client Sample ID: B-62-0.5

TOTAL Metals

Lot-Sample #:	D1K120137-017	Matrix: SOLID

Date Sampled...: 11/07/01 09:30 Date Received..: 11/10/01

% Moisture....: 7.4

		REPORTING			PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	: 1317293					
Mercury	0.046	0.033	mg/kg	SW846 7471A	11/16/01	ENQ4CLAK
		Dilution Fac	ctor: 1	Analysis Time: 21:50		
Prep Batch #	: 1319456					
Silver	ND	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4C1AE
		Dilution Fac	tor: 1	Analysis Time: 15:28	3	
Arsenic	6.8	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4C1AF
		Dilution Fac	tor: 1	Analysis Time: 15:28	ı	
Barium	456	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4CLAC
		Dilution Fac	tor: 1	Analysis Time: 15:28	ı	
Cadmium	21.8	0.50	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4C1AG
		Dilution Fac	tor: 1	Analysis Time: 15:28		
Chromium	47.2	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4C1AD
		Dilution Fac	tor: 1	Analysis Time: 15:28		
Lead	142	0.80	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4C1AH
		Dilution Fac	tor: 1	Analysis Time: 15:28		
Selenium	ND	1.3	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4C1AJ
		Dilution Fac	tor: 1	Analysis Time: 15:28		

Client Sample ID: B-62-5

TOTAL Metals

Lot-Sample #...: D1K120137-018 Matrix....: SOLID

Date Sampled...: 11/07/01 09:35 Date Received..: 11/10/01

% Moisture....: 17

· norbeare	· · · · · · · /					
PARAMETER	RESULT	REPORTI LIMIT	NG <u>UNITS</u>	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	: 1317293					
Mercury	ND	0.033	mg/kg	SW846 7471A	11/16/01	ENQ4F1AK
		Dilution Fac	ctor: 1	Analysis Time: 21:5	L	
Prep Batch #	: 1319456					
Silver	ND	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4F1AE
		Dilution Fac	ctor: 1	Analysis Time: 15:32	2	
Arsenic	5.4	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENO4FLAF
		Dilution Factor: 1		Analysis Time: 15:32		
Barium	201	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4F1AC
		Dilution Fac	ctor: 1	Analysis Time: 15:32		
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4FlAG
		Dilution Fac	tor: 1	Analysis Time: 15:32		-
Chromium	28.8	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4F1AD
		Dilution Factor: 1		Analysis Time: 15:32		
Lead	12.3	0.80	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4F1AH
		Dilution Fac	tor: 1	Analysis Time: 15:32		
Selenium	ND	1.3	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4F1AJ
		Dilution Fac	tor: 1	Analysis Time: 15:32		

Client Sample ID: B-62-17

TOTAL Metals

Lot-Sample #:	D1K120137-019	Matrix: SOLID	

Date Sampled...: 11/07/01 09:55 Date Received..: 11/10/01

* Moisture....: 8.2

· ioibtait.							
PARAMETER	RESULT	REPORTI LIMIT	NG UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #	
Prep Batch #	: 1317293						
Mercury	ND	0.033	mg/kg	SW846 7471A	11/16/01	ENO4H1AK	
		Dilution Fa	ctor: 1	Analysis Time: 21:5	3	-	
Prep Batch #	: 1319456						
Silver	ND	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4H1AE	
		Dilution Fa	ctor: 1	Analysis Time: 15:3	6		
Arsenic	2.2	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENO4H1AF	
		Dilution Fa	ctor: 1	Analysis Time: 15:3			
Barium	43.2	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4H1AC	
		Dilution Fac	ctor: 1	Analysis Time: 15:3	6		
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4H	
		Dilution Fac	ctor: 1	Analysis Time: 15:3	5		
Chromium	11.8	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4H1AD	
		Dilution Fac	ctor: 1	Analysis Time: 15:30	5		
Lead	8.0	0.80	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4H1AH	
		Dilution Fac	ctor: 1	Analysis Time: 15:36	,		
Selenium	ND	1.3	mg/kg	SW846 6010B	11/20-11/21/01	ENQ4H1AJ	
		Dilution Fac	ctor: 1	Analysis Time: 15:36	5		

Client Sample ID: B-61-0.5

TOTAL Metals

Lot-Sample #...: D1K120137-020 Matrix....: SOLID

Date Sampled...: 11/07/01 10:12 Date Received..: 11/10/01

% Moisture....: 5.3

PARAMETER	RESULT	REPORTIN	NG UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	.: 1317293					
Mercury	0.12	0.033 Dilution Fac	mg/kg	SW846 7471A Analysis Time: 21:55	11/16/01	ENQ4M1AK
Prep Batch #	.: 1319456					
Silver	ND	1.0 Dilution Fac	mg/kg tor: 1	SW846 6010B Analysis Time: 15:40	11/20-11/21/01	ENQ4M1AE
Arsenic	10.1	1.0 Dilution Fac	mg/kg	SW846 6010B Analysis Time: 15:40	11/20-11/21/01	ENQ4M1AF
Barium	310	1.0 Dilution Fac	mg/kg	SW846 6010B Analysis Time: 15:40	11/20-11/21/01	ENQ4M1AC
Cadmium	4.6	0.50 Dilution Fac	mg/kg	SW846 6010B Analysis Time: 15:40	11/20-11/21/01	ENQ4M1AG
Chromium	65.8	1.0 Dilution Fact	mg/kg	SW846 6010B Analysis Time: 15:40	11/20-11/21/01	ENQ4MLAD
Lead	542	0.80 Dilution Fact	mg/kg	SW846 6010B Analysis Time: 15:40	11/20-11/21/01	ENQ4MLAH
Selenium	ND	1.3 Dilution Fact	mg/kg	SW846 6010B Analysis Time: 15:40	11/20-11/21/01	ENQ4M1AJ

Client Sample ID: B-61-4

TOTAL Metals

Lot-Sample #...: D1K120137-021 Matrix....: SOLID

Date Sampled...: 11/07/01 10:12 Date Received..: 11/10/01

* Moisture....: 9.2

PARAMETER	RESULT	REPORTIN LIMIT	G UNITS	METHOD		REPARATION- NALYSIS DATE	WORK ORDER #
Prep Batch # Mercury	.: 1317293 0.41	0.033 Dilution Fact	mg/kg	SW846 7471A		1/16/01	ENQ5R1AK
Prep Batch #			<i>(</i>)				·
Silver	ND	1.0 Dilution Fact	mg/kg or: 1	SW846 6010B Analysis Time		1/20-11/21/01	ENQ5R1AE
Arsenic	6.1	1.0 Dilution Fact	mg/kg	SW846 6010B	1	1/20-11/21/01	ENQ5R1AF
Barium	347	1.0	mg/kg	SW846 6010B	1	1/20-11/21/01	ENQ5R1AC
		Dilution Fact	cor: 1	Analysis Time	: 15:44		
Cadmium	6.7	0.50	mg/kg	SW846 6010B	1	1/20-11/21/01	ENQ5
		Dilution Factor: 1		Analysis Time:	: 15:44		
Chromium	33.6	1.0	mg/kg	SW846 6010B	. 1	1/20-11/21/01	ENQ5R1AD
		Dilution Fact	or: 1	Analysis Time:	: 15:44		
Lead	219	0.80	mg/kg	SW846 6010B	1.	1/20-11/21/01	ENQ5R1AH
		Dilution Fact	or: 1	Analysis Time:	: 15:44		
Selenium	ND	1.3	mg/kg	SW846 6010B	1:	1/20-11/21/01	ENQ5R1AJ
		Dilution Fact	or: 1	Analysis Time:	: 15:44		

CAMERON-COLE LLC

Client Sample ID: B-61-18

TOTAL Metals

Lot-Sample #...: D1K120137-022 Matrix.....: SOLID

Date Sampled...: 11/07/01 10:40 Date Received..: 11/10/01

% Moisture....: 6.3

		REPORTIN	G			PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	<u>UNITS</u>	METHO!	D	ANALYSIS DATE	ORDER #
Pren Batch #	!: 1317293						
Mercury	ND	0.033	mg/kg	SW846	7471A	11/16/01	ENQ511AK
-		Dilution Fac			Time: 22:01	11, 10, 01	DIVQUETTAK
Prep Batch #	1319456						
Silver	ND	1.0	mg/kg	SW846	6010B	11/20-11/21/01	FNO511AF
		Dilution Fact			Time: 15:49	11,20 11,21,01	BMQJIIMB
Arsenic	1.2	1.0	mg/kg	SW846	6010B	11/20-11/21/01	ENQ511AF
		Dilution Fact	or: 1	Analysis	Time: 15:49		
Barium	15.4	1.0	mg/kg	SW846	6010B	11/20-11/21/01	ENQ511AC
		Dilution Fact	or: 1	Analysis	Time: 15:49		
Cadmium	ND	0.50	mg/kg	SW846	6010B	11/20-11/21/01	ENQ511AG
		Dilution Fact	or: 1	Analysis	Time: 15:49		
Chromium	1.1	1.0	mg/kg	SW846	6010B	11/20-11/21/01	ENQ511AD
		Dilution Fact	or: 1	Analysis	Time: 15:49		
Lead	1.8	0.80	mg/kg	SW846	6010B	11/20-11/21/01	ENQ511AH
		Dilution Fact	or: 1	Analysis	Time: 15:49		
Selenium	ND	1.3	mg/kg	SW846	6010B	11/20-11/21/01	ENQ511AJ
		Dilution Fact	or: 1	Analysis	Time: 15:49		

CAMERON-COLE LLC

Client Sample ID: B-70-0.5

TOTAL Metals

Lot-Sample # Date Sampled % Moisture	.: 11/07/01		eceived	: 11/10/0	01	Matrix:	SOLID
		REPORTING				PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	<u>METHOI</u>)	ANALYSIS DATE	ORDER #
Prep Batch #	.: 1317293						
Mercury	0.31	0.033	mg/kg	SW846	7471A	11/16/01	ENQ541AL
		Dilution Facto	or: 1	Analysis	Time: 22:03		
Prep Batch #	.: 1319456 ND	1.0 Dilution Facto	mg/kg		6010B Time: 15:53	11/20-11/21/01	ENQ541AF
		Dilucion Face	, , <u>,</u>	Analysis	11me 15:53		
Arsenic	8.4		mg/kg	SW846	6010B	11/20-11/21/01	ENQ541AG
		Dilution Facto	or: 1	Analysis	Time: 15:53		
Barium	168	1.0 Dilution Facto	mg/kg	SW846	6010B Time: 15:53	11/20-11/21/01	ENQ541AD
				•			
Cadmium	3.0	0.50	mg/kg	SW846		11/20-11/21/01	ENQ54
		Dilution Facto	or: 1	Analysis	Time: 15:53		
Chromium	44.7	1.0 Dilution Facto	mg/kg r: 1	SW846 Analysis	6010B Time: 15:53	11/20-11/21/01	ENQ541AE
Lead	105	0.80 Dilution Facto	mg/kg r: 1	SW846 Analysis	6010B Time: 15:53	11/20-11/21/01	ENQ54LAJ

1.3 mg/kg SW846 6010B 11/20-11/21/01 ENQ541AK Dilution Factor: 1 Analysis Time..: 15:53

Selenium ND

CAMERON-COLE LLC

Client Sample ID: B-70-8

TOTAL Metals

Lot-Sample #...: D1K120137-024 Matrix....: SOLID

Date Sampled...: 11/07/01 11:05 Date Received..: 11/10/01

% Moisture....: 19

		REPORTI	NG		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	: 1317293					
Mercury	0.035	0.033	mg/kg	SW846 7471A	11/16/01	ENQ591AK
		Dilution Fac	ctor: 1	Analysis Time: 22:04		
Prep Batch #	: 1319456					
Silver	ND	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENO591AE
		Dilution Fac	ctor: 1	Analysis Time: 15:57		-
Arsenic	4.9	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ591AF
		Dilution Fac	ctor: 1	Analysis Time: 15:57		
Barium	192	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ591AC
		Dilution Fac	ctor: 1	Analysis Time: 15:57		
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/20-11/21/01	ENQ591AG
		Dilution Fac	tor: 1	Analysis Time: 15:57		
Chromium	18.6	1.0	mg/kg	SW846 6010B	11/20-11/21/01	ENQ591AD
		Dilution Fac	tor: 1	Analysis Time: 15:57		
Lead	26.3	0.80	mg/kg	SW846 6010B	11/20-11/21/01	ENQ591AH
		Dilution Fac	tor: 1	Analysis Time: 15:57		
Selenium	ND	1.3	mg/kg	SW846 6010B	11/20-11/21/01	ENQ591AJ
		Dilution Fac	tor: 1	Analysis Time: 15:57		

QC DATA ASSOCIATION SUMMARY

D1K120137

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
001	SOLID	SW846 8260B		1325469	1325235
001	SOLID	MCAWW 160.3 MOD		1330596	1330292
	50212	110111111 100.5 1105		1330330	1330292
002	SOLID	SW846 8260B		1325469	1325235
	SOLID	MCAWW 160.3 MOD		1330596	1330292
003	WATER	SW846 8260B		1324476	1324235
004	SOLID	SW846 8260B		1325469	1325235
	SOLID	SW846 8270C		1325202	1325071
	SOLID	MCAWW 160.3 MOD		1330596	1330292
005	SOLID	SW846 8260B		1325469	1325235
	SOLID	SW846 8270C		1325202	1325233
	SOLID	MCAWW 160.3 MOD		1330596	1330292
				2330330	1330232
006	WATER	SW846 8260B		1324476	1324235
007	SOLID	SW846 8260B		1325469	1325235
	SOLID	SW846 8270C		1325202	1325071
	SOLID	MCAWW 160.3 MOD		1330596	1330292
800	SOLID	SW846 8260B		1325469	1325235
	SOLID	SW846 8270C		1325202	1325071
	SOLID	MCAWW 160.3 MOD		1331243	1331104
009	WATER	SW846 8260B		1324476	1324235
010	SOLID	SW846 7471A		1317293	1317165
	SOLID	SW846 8260B		1325469	1325235
	SOLID	SW846 6010B		1319456	1319222
	SOLID	MCAWW 160.3 MOD		1331243	1331104
011	SOLID	SW846 7471A		1317293	1317165
	SOLID	SW846 8260B		1325469	1325235
	SOLID	SW846 6010B		1319456	1319222
	SOLID	MCAWW 160.3 MOD		1331243	1331104
012	SOLID	SW846 7471A		1317293	1317165
	SOLID	SW846 8260B		1325469	1325235
	SOLID	SW846 6010B		1319456	1319222
	SOLID	MCAWW 160.3 MOD		1331243	1331104
				~~~~~	1001104

(Continued on next page)

# QC DATA ASSOCIATION SUMMARY

# D1K120137

Sample Preparation and Analysis Control Numbers

SOLID	SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
SOLID   SW846 8260B   1322127   1322029	017	COL TD	G0046 54545			
SOLID   SW846 6010B   1319456   1319222   1319456   1319222   1319456   1319222   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   1319456   13	013					
SOLID   MCAWW 160.3 MOD   1331243   1331104						
SOLID					1319456	1319222
SOLID		SOLID	MCAWW 160.3 MOD		1331243	1331104
SOLID	014	SOLID	SW846 7471A		1317293	1317165
SOLID   MCAWW 160.3 MOD   1331243   1331104		SOLID	SW846 8260B		1322127	1322029
SOLID		SOLID	SW846 6010B		1319456	1319222
SOLID   MCAWW 160.3 MOD   1331243   1331104		SOLID	MCAWW 160.3 MOD	•		
SOLID   MCAWW 160.3 MOD   1331243   1331104	015	SOLID	SW846 8260B		1325441	1325216
SOLID						
SOLID   MCAWW 160.3 MOD   1331243   1331104			110111111 10015 1100		1331243	1331104
SOLID	016	SOLID	SW846 8260B		1322127	1322029
SOLID SW846 8260B 1322127 1322029 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  018 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1322127 1322029 SOLID MCAWW 160.3 MOD 1331243 1331104  019 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  019 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104		SOLID	MCAWW 160.3 MOD		1331243	1331104
SOLID SW846 8260B 1322127 1322029 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  018 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1322127 1322029 SOLID MCAWW 160.3 MOD 1331243 1331104  019 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  019 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104	017	SOLID	SW846 7471A		1217202	1217165
SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  018 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1322127 1322029 SOLID MCAWW 160.3 MOD 1331243 1331104  019 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8260B 1325449 1325235						
SOLID MCAWW 160.3 MOD 1331243 1331104  018						
018						
SOLID SW846 8260B 1322127 1322029 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  019 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104		50215	11011MW 100.5 110D		1331243	1331104
SOLID       SW846       8260B       1322127       1322029         SOLID       SW846       6010B       1319456       1319222         SOLID       MCAWW       160.3 MOD       1331243       1331104         019       SOLID       SW846       7471A       1317293       1317165         SOLID       SW846       8260B       1325441       1325216         SOLID       SW846       6010B       1319456       1319222         SOLID       SW846       7471A       1317293       1317165         SOLID       SW846       8260B       1325441       1325216         SOLID       SW846       6010B       1319456       1319222         SOLID       MCAWW       160.3 MOD       1331243       1331104         021       SOLID       SW846       8260B       1325441       1325216         SOLID       SW846       6010B       1319456       1319222         SOLID       SW846       7471A </td <td>018</td> <td>SOLID</td> <td>SW846 7471A</td> <td></td> <td>1317293</td> <td>1317165</td>	018	SOLID	SW846 7471A		1317293	1317165
SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  019 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104		SOLID	SW846 8260B			
SOLID MCAWW 160.3 MOD 1331243 1331104  019 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 8010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104		SOLID	SW846 6010B			
SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104		SOLID	MCAWW 160.3 MOD			
SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104	019	SOLTD	SW846 74717		1217202	1217165
SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235	0.2.5					
SOLID MCAWW 160.3 MOD 1331243 1331104  020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235						
020 SOLID SW846 7471A 1317293 1317165 SOLID SW846 6010B 1319456 1319222 SOLID SW846 8260B 1325441 1325216 SOLID SW846 7471A 1317293 1317165 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235 SOLID SW846 8260B 1325469 1325235						
SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235		SOUTD	MCAWW 160.3 MOD		1331243	1331104
SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235	020	SOLID	SW846 7471A		1317293	1317165
SOLID MCAWW 160.3 MOD 1331243 1331104  021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235			SW846 8260B		1325441	1325216
021 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104 022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235		SOLID	SW846 6010B		1319456	1319222
SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235		SOLID	MCAWW 160.3 MOD		1331243	1331104
SOLID SW846 8260B 1325441 1325216 SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235	021	SOLID	SW846 7471A		1317293	1317165
SOLID SW846 6010B 1319456 1319222 SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235		SOLID	· ·			
SOLID MCAWW 160.3 MOD 1331243 1331104  022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235						<del>-</del>
022 SOLID SW846 7471A 1317293 1317165 SOLID SW846 8260B 1325469 1325235						
SOLID SW846 8260B 1325469 1325235			120.3 1100		T931243	T331104
GOLTE GUALA CALAR	022	SOLID	SW846 7471A		1317293	1317165
SOLID SW846 6010B 1319456 1319222		SOLID	SW846 8260B		1325469	1325235
		SOLID	SW846 6010B		1319456	1319222

(Continued on next page)

# QC DATA ASSOCIATION SUMMARY

# D1K120137

# Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
•	SOLID	MCAWW 160.3 MOD		1331243	1331104
023	SOLID	SW846 7471A		1317293	1317165
	SOLID	SW846 6010B		1319456	1319222
	SOLID	MCAWW 160.3 MOD		1331243	1331104
024	SOLID	SW846 7471A		1317293	1317165
	SOLID	SW846 8260B		1325469	1325235
	SOLID	SW846 6010B		1319456	1319222
	SOLID	MCAWW 160.3 MOD		1331243	1331104

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: EPE4M1AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-469 EPE4M1AD-LCSD

 Prep Date....:
 11/19/01
 Analysis Date..:
 11/19/01

 Prep Batch #...:
 1325469
 Analysis Time..:
 11:17

Dilution Factor: 1

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	97	(78 - 118)			SW846 8260B
	99	(78 - 118)	2.3	(0-25)	SW846 8260B
Benzene	106	(79 - 121)			SW846 8260B
	110	(79 - 121)	3.3	(0-25)	SW846 8260B
Chlorobenzene	89	(76 - 116)			SW846 8260B
	90	(76 - 116)	1.8	(0-25)	SW846 8260B
Toluene	89	(76 - 116)	•		SW846 8260B
	92	(76 - 116)	2.9	(0-25)	SW846 8260B
Trichloroethene	101	(83 - 123)			SW846 8260B
	108	(83 - 123)	6.9	(0-25)	SW846 8260B
	•	PERCENT	RECOV	ERY	
SURROGATE	_	RECOVERY	LIMIT	<u>s</u>	
Dibromofluoromethane		109	(80 -	120)	
		112	(80 <u>-</u>	1201	

SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	109	(80 - 120)
	112	(80 - 120)
1,2-Dichloroethane-d4	103	(79 - 125)
	104	(79 - 125)
4-Bromofluorobenzene	102	(71 - 132)
	101	(71 - 132)
Toluene-d8	94	(77 - 117)
	95	(77 - 117)

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### LABORATORY CONTROL SAMPLE DATA REPORT

# GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: EPE4M1AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-469 EPE4M1AD-LCSD

 Prep Date.....: 11/19/01
 Analysis Date..: 11/19/01

 Prep Batch #...: 1325469
 Analysis Time..: 11:17

Dilution Factor: 1

	SPIKE	MEASURED	)	PERCENT		
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	50.0	48.5	ug/kg	97		SW846 8260B
	50.0	49.7	ug/kg	99	2.3	SW846 8260B
Benzene	50.0	53.1	ug/kg	106		SW846 8260B
	50.0	54.9	ug/kg	110	3.3	SW846 8260B
Chlorobenzene	50.0	44.3	ug/kg	89		SW846 8260B
	50.0	45.1	ug/kg	90	1.8	SW846 8260B
Toluene	50.0	44.5	ug/kg	89		SW846 8260B
	50.0	45.9	ug/kg	92	2.9	SW846 8260B
Trichloroethene	50.0	50.3	ug/kg	101		SW846 8260B
	50.0	53.9	ug/kg	108	6.9	SW846 8260B
			PERCENT	RECOVERY		
SURROGATE			RECOVERY	LIMITS		
Dibromofluoromethane			109	(80 - 120	)	
			112	(80 - 120	)	
1,2-Dichloroethane-d4			103	(79 - 125	)	
			104	(79 - 125	)	
4-Bromofluorobenzene			102	(71 - 132	)	
			101	(71 - 132	)	
Toluene-d8			94	(77 - 117	)	
			95	(77 - 117	)	

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: EPCJA1AC-LCS Matrix...... WATER

LCS Lot-Sample#: D1K200000-476

EPCJA1AD-LCSD

Prep Date....: 11/19/01

**Analysis** Date..: 11/19/01

Prep Batch #...: 1324476

Analysis Time..: 09:59

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	94	(79 - 119)		SW846 8260B
	91	(79 - 119)	3.3 (0-20)	SW846 8260B
Benzene	100	(79 - 119)		SW846 8260B
	96	(79 - 119)	3.3 (0-20)	SW846 8260B
Chlorobenzene	93	(76 - 116)		SW846 8260B
	95	(76 - 116)	2.6 (0-20)	SW846 8260B
Toluene	89 .	(75 - 122)		SW846 8260B
	90	(75 - 122)	2.0 (0-20)	SW846 8260B
Trichloroethene	100	(81 - 121)		SW846 8260B
	97	(81 - 121)	2.8 (0-20)	SW846 8260B
		PERCENT	RECOVERY	
SURROGATE	•	RECOVERY	LIMITS	
Dibromofluoromethane		101	(80 - 120)	
		98	(80 - 120)	
1,2-Dichloroethane-d4		101	(72 - 127)	
		95	(72 - 127)	
4-Bromofluorobenzene		101	(79 - 119)	
		107	(79 - 119)	
Toluene-d8		96	(79 - 119)	
		99	(79 - 119)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### LABORATORY CONTROL SAMPLE DATA REPORT

# GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: EPCJA1AC-LCS Matrix...... WATER

LCS Lot-Sample#: D1K200000-476 EPCJA1AD-LCSD

 Prep Date....:
 11/19/01
 Analysis Date..:
 11/19/01

 Prep Batch #...:
 1324476
 Analysis Time..:
 09:59

Dilution Factor: 1

	SPIKE	MEASURED	)	PERCENT			
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD	
1,1-Dichloroethene	10.0	9.37	ug/L	94		SW846 8	8260B
	10.0	9.07	ug/L	91	3.3	SW846 8	3260B
Benzene	10.0	9.98	ug/L	100		SW846 8	3260B
	10.0	9.65	ug/L	96	3.3	SW846 8	3260B
Chlorobenzene	10.0	9.30	ug/L	93		SW846 8	3260B
	10.0	9.54	ug/L	95	2.6	SW846 8	3260B
Toluene	10.0	8.86	ug/L	89		SW846 8	3260B
	10.0	9.03	ug/L	90	2.0	SW846 8	3260B
Trichloroethene	10.0	10.0	ug/L	100		SW846 8	3260B
	10.0	9.73	ug/L	97	2.8	SW846 8	3260B
GETT DOGS TO			PERCENT	RECOVERY			
SURROGATE			RECOVERY	LIMITS	<del></del>		
Dibromofluoromethane			101	(80 - 120	)		
			98	(80 - 120	)		
1,2-Dichloroethane-d4			101	(72 - 127	)		
			95	(72 - 127	) .		
4-Bromofluorobenzene			101	(79 - 119	)		
			107	(79 - 119	)		
Toluene-d8			96	(79 - 119	)		
			99	(79 - 119	)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: EN7521AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K180000-127

EN7521AD-LCSD Analysis Date..: 11/17/01

Prep Date....: 11/17/01
Prep Batch #...: 1322127

Analysis Time..: 18:04

Dilution Factor: 1

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
Benzene	101	(79 - 121)			SW846 8260B
	108	(79 - 121)	6.3	(0-25)	SW846 8260B
Chlorobenzene	86	(76 - 116)			SW846 8260B
	94	(76 - 116)	8.6	(0-25)	SW846 8260B
Toluene	86	(76 - 116)			SW846 8260B
	92	(76 - 116)	6.8	(0-25)	SW846 8260B
Trichloroethene	100	(83 - 123)			SW846 8260B
	105	(83 - 123)	4.8	(0-25)	SW846 8260B
1,1-Dichloroethene	98	(78 - 118)			SW846 8260B
	103	(78 - 118)	4.6	(0-25)	SW846 8260B
		PERCENT	RECOV	ERY	
SURROGATE		RECOVERY	LIMIT	'S	
Dibromofluoromethane		105	(80 -	120)	
		110	(80 -	120)	
1,2-Dichloroethane-d4		93	(79 -	125)	
		98	(79 -	125)	
4-Bromofluorobenzene		101	(71 -	132)	
		104	(71 -	132)	
Toluene-d8		91	(77 -	117)	
		99	(77 -	117)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### LABORATORY CONTROL SAMPLE DATA REPORT

# GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: EN7521AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K180000-127 EN7521AD-LCSD

Prep Date....: 11/17/01 Analysis Date..: 11/17/01

Prep Batch #...: 1322127 Analysis Time..: 18:04

Dilution Factor: 1

	SPIKE	MEASURED	1	PERCENT		
PARAMETER	AMOUNT	TRUOMA	UNITS	RECOVERY	RPD	METHOD
Benzene	50.0	50.5	ug/kg	101		SW846 8260B
	50.0	53.8	ug/kg	108	6.3	SW846 8260B
Chlorobenzene	50.0	43.1	ug/kg	86		SW846 8260B
	50.0	47.0	ug/kg	94	8.6	SW846 8260B
Toluene	50.0	43.2	ug/kg	86		SW846 8260B
	50.0	46.2	ug/kg	92	6.8	SW846 8260B
Trichloroethene	50.0	50.2	ug/kg	100		SW846 8260B
	50.0	52.7	ug/kg	105	4.8	SW846 8260B
1,1-Dichloroethene	50.0	49.1	ug/kg	98		SW846 8260B
	50.0	51.4	ug/kg	103	4.6	SW846 8260B
			PERCENT	RECOVERY		
SURROGATE			RECOVERY	LIMITS		
Dibromofluoromethane			105	(80 - 120	)	
			110	(80 - 120	)	
1,2-Dichloroethane-d4			93	(79 - 125	)	
			98	(79 - 125	)	
4-Bromofluorobenzene			101	(71 - 132	)	
			104	(71 - 132	)	
Toluene-d8			91	(77 - 117	)	
			99	(77 - 117	)	
						•

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

# LABORATORY CONTROL SAMPLE EVALUATION REPORT

# GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: EPEXF1AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-441 EPEXF1AD-LCSD

 Prep Date....:
 11/18/01
 Analysis Date..:
 11/18/01

 Prep Batch #...:
 1325441
 Analysis Time..:
 11:13

Dilution Factor: 1

	PERCENT	RECOVERY	RP	ďΩ	
PARAMETER	RECOVERY	LIMITS	RPD LI	MITS	METHOD
1,1-Dichloroethene	99	(78 - 118)			SW846 8260B
	106	(78 - 118)	7.2 (0	-25)	SW846 8260B
Benzene	106	(79 - 121)			SW846 8260B
	116	(79 - 121)	9.4 (0	-25)	SW846 8260B
Chlorobenzene	89	(76 - 116)			SW846 8260B
	96	(76 - 116)	7.6 (0	-25)	SW846 8260B
Toluene	91	(76 - 116)	•		SW846 8260B
	100	(76 - 116)	9.3 (0	-25)	SW846 8260B
Trichloroethene	103	(83 - 123)			SW846 8260B
	114	(83 - 123)	10 (0	-25)	SW846 8260B
		PERCENT	RECOVERY		
SURROGATE		RECOVERY	LIMITS		·
Dibromofluoromethane		105	(80 - 12	0)	
		116	(80 - 12	0)	
1,2-Dichloroethane-d4		102	(79 - 12	5)	
		113	(79 - 12	5)	

		( /
•	116	(80 - 120)
1,2-Dichloroethane-d4	102	(79 - 125)
	113	(79 - 125)
4-Bromofluorobenzene	99	(71 - 132)
	108	(71 - 132)
Toluene-d8	92	(77 - 117)
	101	(77 - 117)

# NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### LABORATORY CONTROL SAMPLE DATA REPORT

#### GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: EPEXF1AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-441 EPEXF1AD-LCSD

Prep Date....: 11/18/01 Analysis Date..: 11/18/01
Prep Batch #...: 1325441 Analysis Time..: 11:13

Dilution Factor: 1

	SPIKE	MEASURED	)	PERCENT		
PARAMETER	THUOMA	TRUOMA	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	50.0	49.4	ug/kg	99		SW846 8260B
	50.0	53.1	ug/kg	106	7.2	SW846 8260B
Benzene	50.0	52.8	ug/kg	106		SW846 8260B
	50.0	58.0	ug/kg	116	9.4	SW846 8260B
Chlorobenzene	50.0	44.5	ug/kg	89		SW846 8260B
	50.0	48.0	ug/kg	96	7.6	SW846 8260B
Toluene	50.0	45.4	ug/kg	91		SW846 8260B
	50.0	49.8	ug/kg	100	9.3	SW846 8260B
Trichloroethene	50.0	51.4	ug/kg	103		SW846 8260B
	50.0	56.9	ug/kg	114	10	SW846 8260B
			PERCENT	RECOVERY		
SURROGATE	_		RECOVERY	LIMITS	_	
Dibromofluoromethane			105	(80 - 120	)	
			116	(80 - 120	)	
1,2-Dichloroethane-d4			102	(79 - 125	)	
			113	(79 - 125	)	
4-Bromofluorobenzene			99	(71 - 132	)	
			108	(71 - 132	)	
Toluene-d8			92	(77 - 117	)	
			101	(77 - 117	)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: EPE4M1AA Matrix....: SOLID

MB Lot-Sample #: D1K210000-469

Prep Date....: 11/19/01 Analysis Time..: 12:10

Analysis Date..: 11/19/01 Prep Batch #...: 1325469

Dilution Factor: 1

		REPORTI	REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
Benzene	ND	5.0	ug/kg	SW846 8260B	
Bromobenzene	ND	5.0	ug/kg	SW846 8260B	
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B	
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B	
Bromoform	ND	5.0	ug/kg	SW846 8260B	
Bromomethane	ND	10	ug/kg	SW846 8260B	
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B	
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B	
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B	
Chloroethane	ND	10	ug/kg	SW846 8260B	
Chloroform	ND	10	ug/kg	SW846 8260B	
Chloromethane	ND	10	ug/kg	SW846 8260B	
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B	
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B	
Dibromomethane	ND	5.0	ug/kg	SW846 8260B	
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B	
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B	
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B	
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B	
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B	
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B	
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B	
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B	
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B	
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B	
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B	
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B	
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B	
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B	
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B	
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B	
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B	
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B	
Methylene chloride	ND	5.0	ug/kg	SW846 8260B	
Naphthalene	ND	5.0	ug/kg	SW846 8260B	
-Propylbenzene	ND	5.0	ug/kg	SW846 8260B	
Styrene	ND	5.0	ug/kg	SW846 8260B	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B	

# GC/MS Volatiles

		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trichloro- benzene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
o-Xylene	ND	2.5	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	2.5	ug/kg	SW846 8260B
1,2-Dibromo-3- chloropropane (DBCP)	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846 8260B
	PERCENT	RECOVER	Y	
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	111	(80 - 12	20)	
1,2-Dichloroethane-d4	105	(79 - 12	25)	
4-Bromofluorobenzene	101	(71 - 13	32)	
Toluene-d8	96	(77 - 13	17)	

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: EPCJA1AA Matrix...... WATER

MB Lot-Sample #: D1K200000-476

Prep Date....: 11/19/01 Analysis Time..: 10:49

Analysis Date..: 11/19/01 Prep Batch #...: 1324476

Dilution Factor: 1

		REPORTI	NG		
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
Benzene	ND	1.0	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	2.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	2.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	2.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Bromochloromethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B	
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B	
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B	
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trichloro-	ND	1.0	ug/L	SW846 8260B	
benzene					
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
o-Xylene	ND	1.0	ug/L	SW846 8260B	
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B	
1,2-Dibromo-3-	ND	2.0	ug/L	SW846 8260B	
chloropropane (DBCP)					
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B	

(Continued on next page)

# GC/MS Volatiles

		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Bromobenzene	ND	1.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
	PERCENT	RECOVERY	ľ	
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	99	(80 - 12	20)	
1,2-Dichloroethane-d4	97	(72 - 12	27)	
4-Bromofluorobenzene	104	(79 - 11	L9)	
Toluene-d8	97	(79 - 13	L9)	

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

#### GC/MS Volatiles

REPORTING

Client Lot #...: D1K120137 Work Order #...: EN7521AA Matrix.....: SOLID

MB Lot-Sample #: D1K180000-127

Prep Date....: 11/17/01 Analysis Time..: 18:54

Analysis Date..: 11/17/01 Prep Batch #...: 1322127

Dilution Factor: 1

		REPORTING			
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
Benzene	ND	5.0	ug/kg	SW846 8260B	
Bromobenzene	ND	5.0	ug/kg	SW846 8260B	
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B	
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B	
Bromoform	ND	5.0	ug/kg	SW846 8260B	
Bromomethane	ND	10	ug/kg	SW846 8260B	
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B	
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B	
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B	
Chloroethane	ND	10	ug/kg	SW846 8260B	
chloroform	ND	10	ug/kg	SW846 8260B	
Chloromethane	ND	10	ug/kg	SW846 8260B	
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B	
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B	
Dibromomethane	ND	5.0	ug/kg	SW846 8260B	
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B	
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B	
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B	
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B	
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B	
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B	
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B	
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B	
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B	
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B	
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B	
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B	
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B	
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B	
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B	
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B	
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B	
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B	
Methylene chloride	ND	5.0	ug/kg	SW846 8260B	
Naphthalene	ND	5.0	ug/kg	SW846 8260B	
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B	
Styrene	ND	5.0	ug/kg	SW846 8260B	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B	

# GC/MS Volatiles

Client Lot #: DIKI20137	work Order #: EN/521AA	Matrix SOLID

		REPORTING			
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B	
Tetrachloroethene	ND	. 5.0	ug/kg	SW846 8260B	
Toluene	ND	5.0	ug/kg	SW846 8260B	
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B	
1,2,4-Trichloro-	ND	5.0	ug/kg	SW846 8260B	
benzene					
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B	
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B	
Trichloroethene	ND	5.0	ug/kg	SW846 8260B	
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B	
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B	
1,2-Dibromo-3-	ND	10	ug/kg	SW846 8260B	
chloropropane (DBCP)					
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846 8260B	
o-Xylene	ND	2.5	ug/kg	SW846 8260B	
m-Xylene & p-Xylene	ND	2.5	ug/kg	SW846 8260B	
	PERCENT	RECOVER	ď		
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	112	(80 - 12	20)		
1,2-Dichloroethane-d4	103	(79 - 12	25)		
4-Bromofluorobenzene	106	(71 - 13	32)		
Toluene-d8	102	(77 - 13	17)		
NOTE(S):					

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### GC/MS Volatiles

Client Lot #...: D1K120137

MB Lot-Sample #: D1K210000-441

Analysis Date..: 11/18/01

Dilution Factor: 1

Work Order #...: EPEXF1AA

Matrix..... SOLID

Analysis Time..: 12:03

Prep Date....: 11/18/01

Prep Batch #...: 1325441

REPORTING

PARAMETER	RESULT	LIMIT	UNITS	METHOD
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
hloroform	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10 .	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
_Naphthalene	ND	5.0	ug/kg	SW846 8260B
-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
styrene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

# GC/MS Volatiles

Client Lot #: D1K120137	Work Order # : EPEXFLAA	Matrix SOLID

		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trichloro-	ND	5.0	ug/kg	SW846 8260B
benzene				
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
o-Xylene	ND	2.5	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	2.5	ug/kg	SW846 8260B
1,2-Dibromo-3-	ND	10	ug/kg	SW846 8260B
chloropropane (DBCP)				
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846 8260B
	PERCENT	RECOVER	Y	
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	105	(80 - 12	20)	
1,2-Dichloroethane-d4	101	(79 - 12	25)	
4-Bromofluorobenzene	102	(71 - 13	32)	
Toluene-d8	95	(77 - 13	17)	

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: ENQ511AN-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-022 ENQ511AP-MSD

Date Sampled...: 11/07/01 10:40 Date Received..: 11/10/01
Prep Date....: 11/19/01 Analysis Date..: 11/19/01
Prep Batch # . 1325469 Analysis Time 13.11

Prep Batch #...: 1325469 Analysis Time..: 13:11

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	93	(78 - 118)			SW846 8260B
	101	(78 - 118)	8.6	(0-25)	SW846 8260B
Benzene	99	(79 - 121)			SW846 8260B
	109	(79 - 121)	9.9	(0-25)	SW846 8260B
Chlorobenzene	80	(76 - 116)			SW846 8260B
	87	(76 - 116)	8.8	(0-25)	SW846 8260B
Toluene	80	(76 - 116)			SW846 8260B
	89	(76 - 116)	10	(0-25)	SW846 8260B
Trichloroethene	96	(83 - 123)			SW846 8260B
	108	(83 - 123)	12	(0-25)	SW846 8260B
•		DEDCENT		DECOMENY	

<b></b> _	PERCENT	RECOVERY		
BURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	106	(80 - 120)		
	113	(80 - 120)		
1,2-Dichloroethane-d4	102	(79 - 125)		
	109	(79 - 125)		
l-Bromofluorobenzene	96	(71 - 132)		
	101	(71 - 132)		
Coluene-d8	88	(77 - 117)		
	94	(77 - 117)		

# NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### MATRIX SPIKE SAMPLE DATA REPORT

# GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: ENQ511AN-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-022 ENQ511AP-MSD

 Date Sampled...:
 11/07/01 10:40
 Date Received..:
 11/10/01

 Prep Date....:
 11/19/01
 Analysis Date..:
 11/19/01

 Prep Batch #...:
 1325469
 Analysis Time..:
 13:11

 Dilution Factor:
 1
 % Moisture....:
 6.3

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	TRUOMA	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO	)
1,1-Dichloroethene	ND	50.0	46.3	ug/kg	93		SW846	8260B
	ND	50.0	50.5	ug/kg	101	8.6	SW846	8260B
Benzene	ND	50.0	49.3	ug/kg	99		SW846	8260B
	ND	50.0	54.5	ug/kg	109	9.9	SW846	8260B
Chlorobenzene	ND	50.0	40.0	ug/kg	80		SW846	8260B
	ND	50.0	43.6	ug/kg	87	8.8	SW846	8260B
Toluene	ND	50.0	40.2	ug/kg	80		SW846	8260B
	ND	50.0	44.4	ug/kg	89	10	SW846	8260B
Trichloroethene	ND	50.0	48.1	ug/kg	96		SW846	8260B
	ND	50.0	54.2	ug/kg	108	12	SW846	8260B

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	106	(80 - 120)
	113	(80 - 120)
1,2-Dichloroethane-d4	102	(79 - 125)
	109	(79 - 125)
4-Bromofluorobenzene	96	(71 - 132)
	101	(71 - 132)
Toluene-d8	88	(77 - 117)
	94	(77 - 117)

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: ENP781CC-MS Matrix..... WATER

MS Lot-Sample #: D1K100172-013 ENP781CD-MSD

Date Sampled...: 11/09/01 09:00 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324476 Analysis Time..: 13:40

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS RI	PD LIMITS	METHOD
1,1-Dichloroethene	90	(79 - 119)		SW846 8260B
	91	(79 - 119) 1.	.0 (0-20)	SW846 8260B
Benzene	92	(79 - 119)		SW846 8260B
	95	(79 - 119) 2.	.9 (0-20)	SW846 8260B
Chlorobenzene	89	(76 - 116)		SW846 8260B
	92	(76 - 116) 3.	.7 (0-20)	SW846 8260B
Toluene	86	(75 - 122)		SW846 8260B
	89	(75 - 122) 3.	.9 (0-20)	SW846 8260B
Trichloroethene	98	(81 - 121)		SW846 8260B
	98	(81 - 121) 0.	.03 (0-20)	SW846 8260B

URROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Dibromofluoromethane	102	(80 - 120)		
	102	(80 - 120)		
l,2-Dichloroethane-d4	99	(72 - 127)		
	101	(72 - 127)		
-Bromofluorobenzene	102	(79 - 119)		
	104	(79 - 119)		
Foluene-d8	98	(79 - 119)		
	98	(79 - 119)		

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### MATRIX SPIKE SAMPLE DATA REPORT

#### GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: ENP781CC-MS Matrix....: WATER

MS Lot-Sample #: D1K100172-013 ENP781CD-MSD

Date Sampled...: 11/09/01 09:00 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01

Analysis Time..: 13:40 Prep Batch #...: 1324476

Dilution Factor: 1

	SAMPLE	SPIKE	MEASRD		PERCENT				
PARAMETER	TNUOMA	TMA	TRUOMA	UNITS	RECOVERY	RPD	METHO	D	
1,1-Dichloroethene	ND	10.0	9.02	ug/L	90		SW846	8260B	
	ND	10.0	9.11	ug/L	91	1.0	SW846	8260B	
Benzene	ND	10.0	9.23	ug/L	92		SW846	8260B	
	ND	10.0	9.51	ug/L	95	2.9	SW846	8260B	
Chlorobenzene	ND	10.0	8.86	ug/L	89		SW846	8260B	
	ND	10.0	9.20	ug/L	92	3.7	SW846	8260B	
Toluene	ND	10.0	8.57	ug/L	86		SW846	8260B	
	ND	10.0	8.91	ug/L	89	3.9	SW846	8260B	
Trichloroethene	ND	10.0	9.78	ug/L	98		SW846	8260B	
	ND	10.0	9.78	ug/L	98	0.03	SW846	8260B	
			PERCENT		RECOVERY				4
SURROGATE			RECOVER	<u>Y</u>	LIMITS				•
Dibromofluoromethane			102		(80 - 120	0)			
			102		(80 - 120	0)			
1,2-Dichloroethane-d4			99		(72 - 12	7)			
			101		(72 - 12	7)			
4-Bromofluorobenzene			102		(79 - 119	9)			
			104		(79 - 119	9)			
Toluene-d8			98		(79 - 119	9)			
			98		(79 - 119	∍)			
NOTE(S):					•				

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: ENP731AN-MS Matrix.....: SOLID

MS Lot-Sample #: D1K100174-011 ENP731AP-MSD

Date Sampled...: 11/08/01 14:40 Date Received..: 11/09/01 Prep Date....: 11/17/01 Analysis Date..: 11/18/01 Prep Batch #...: 1322127 Analysis Time..: 01:44

Dilution Factor: 1 % Moisture....: 0.0

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	88	(78 - 118)			SW846 8260B
	91	(78 - 118)	3.7	(0-25)	SW846 8260B
Benzene	97	(79 - 121)			SW846 8260B
	102	(79 - 121)	4.7	(0-25)	SW846 8260B
Chlorobenzene	77	(76 - 116)			SW846 8260B
	76	(76 - 116)	0.61	(0-25)	SW846 8260B
Toluene	81	(76 - 116)			SW846 8260B
	83	(76 - 116)	2.7	(0-25)	SW846 8260B
Trichloroethene	.90	(83 - 123)	•		SW846 8260B
	96	(83 - 123)	6.8	(0-25)	SW846 8260B

<b>.</b>	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	110	(80 - 120)
	114	(80 - 120)
1,2-Dichloroethane-d4	116	(79 - 125)
	119	(79 - 125)
4-Bromofluorobenzene	105	(71 - 132)
	109	(71 - 132)
Foluene-d8	99	(77 - 117)
	98	(77 - 117)

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

# MATRIX SPIKE SAMPLE DATA REPORT

# GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: ENP731AN-MS Matrix.....: SOLID

MS Lot-Sample #: D1K100174-011 ENP731AP-MSD

Date Sampled...: 11/08/01 14:40 Date Received..: 11/09/01
Prep Date....: 11/17/01 Analysis Date..: 11/18/01
Prep Batch #...: 1322127 Analysis Time..: 01:44
Dilution Factor: 1 % Moisture....: 0.0

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOL	)
1,1-Dichloroethene	ND	50.0	43.9	ug/kg	88		SW846	8260B
	ND	50.0	45.6	ug/kg	91	3.7	SW846	8260B
Benzene	ND	50.0	48.6	ug/kg	97		SW846	8260B
	ND	50.0	51.0	ug/kg	102	4.7	SW846	8260B
Chlorobenzene	ND	50.0	38.4	ug/kg	77		SW846	8260B
	ND	50.0	38.2	ug/kg	76	0.61	SW846	8260B
Toluene	ND	50.0	40.3	ug/kg	81		SW846	8260B
	ND	50.0	41.4	ug/kg	83	2.7	SW846	8260B
Trichloroethene	ND	50.0	44.9	ug/kg	90		SW846	8260B
	ND	50.0	48.1	ug/kg	96	6.8	SW846	8260B

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	110	(80 - 120)
	114	(80 - 120)
1,2-Dichloroethane-d4	116	(79 - 125)
	119	(79 - 125)
4-Bromofluorobenzene	105	(71 - 132)
	109	(71 - 132)
· Toluene-d8	99	(77 - 117)
	98	(77 - 117)

# NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

# MATRIX SPIKE SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: ENQ4H1AN-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-019 ENQ4H1AP-MSD

Date Sampled...: 11/07/01 09:55 Date Received..: 11/10/01 Prep Date....: 11/18/01 Analysis Date..: 11/18/01 Prep Batch #...: 1325441 Analysis Time..: 13:29

Dilution Factor: 1 % Moisture....: 8.2

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	102	(78 - 118)			SW846 8260B
	96	(78 - 118)	5.6	(0-25)	SW846 8260B
Benzene	111	(79 - 121)			SW846 8260B
	105	(79 - 121)	6.1	(0-25)	SW846 8260B
Chlorobenzene	90	(76 - 116)			SW846 8260B
·	84	(76 - 116)	7.1	(0-25)	SW846 8260B
Toluene	93	(76 - 116)			SW846 8260B
	85	(76 - 116)	9.5	(0-25)	SW846 8260B
Trichloroethene	108	(83 - 123)			SW846 8260B
	100	(83 - 123)	8.1	(0-25)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	112	(80 - 120)
	104	(80 - 120)
,2-Dichloroethane-d4	115	(79 - 125)
	106	(79 - 125)
-Bromofluorobenzene	106	(71 - 132)
	94	(71 - 132)
oluene-d8	97	(77 - 117)
	88	(77 - 117)

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### MATRIX SPIKE SAMPLE DATA REPORT

# GC/MS Volatiles

Client Lot #...: D1K120137 Work Order #...: ENQ4H1AN-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-019 ENQ4H1AP-MSD

Date Sampled...: 11/07/01 09:55 Date Received..: 11/10/01
Prep Date....: 11/18/01 Analysis Date..: 11/18/01
Prep Batch #...: 1325441 Analysis Time..: 13:29

Dilution Factor: 1 % Moisture....: 8.2

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	TRUOMA	AMT	AMOUNT	UNITS	RECOVERY	<u>RPD</u>	METHOI	)
1,1-Dichloroethene	ND	50.0	50.8	ug/kg	102		SW846	8260B
	ND	50.0	48.0	ug/kg	96	5.6	SW846	8260B
Benzene	ND	50.0	55.6	ug/kg	111		SW846	8260B
	ND	50.0	52.3	ug/kg	105	6.1	SW846	8260B
Chlorobenzene	ND	50.0	45.2	ug/kg	90		SW846	8260B
	ND	50.0	42.1	ug/kg	84	7.1	SW846	8260B
Toluene	ND	50.0	46.6	ug/kg	93		SW846	8260B
	ND	50.0	42.3	ug/kg	85	9.5	SW846	8260B
Trichloroethene	ND	50.0	54.3	ug/kg	108		SW846	8260B
	ND	50.0	50.0	ug/kg	100	8.1	SW846	8260B
			PERCENT	•	RECOVERY			_
SURROGATE			RECOVER	<u>Y</u>	LIMITS	_		
Dibromofluoromethane			112		(80 - 120	))		
			104		(80 - 120	))		
1,2-Dichloroethane-d4			115		(79 - 125	5)		
			106		(79 - 125	5)		
4-Bromofluorobenzene			106		(71 - 132	2)		
			94		(71 - 132	2)		
Toluene-d8			97		(77 - 117	7)		
			88		(77 - 117	7)		

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

# GC/MS Semivolatiles

Client Lot #...: D1K120137 Work Order #...: EPDK41AC Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-202

Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Prep Batch #...: 1325202 Analysis Time..: 15:45

Dilution Factor: 1

	222 2212	DEGG! EDI:	
	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
Acenaphthene	71	(49 - 93)	SW846 8270C
Pyrene	74	( <del>4</del> 8 - 97)	SW846 8270C
4-Chloro-3-methylphenol	73	(52 - 93)	SW846 8270C
2-Chlorophenol	74	(51 - 91)	SW846 8270C
1,4-Dichlorobenzene	67	(46 - 86)	SW846 8270C
2,4-Dinitrotoluene	73	(53 - 105)	SW846 8270C
4-Nitrophenol	68	(29 - 115)	SW846 8270C
N-Nitrosodi-n-propyl-	71	(46 - 86)	SW846 8270C
amine			
Pentachlorophenol	68	(27 - 97)	SW846 8270C
Phenol	74	(50 - 90)	SW846 8270C
1,2,4-Trichloro-	70	(49 ~ 90)	SW846 8270C
benzene			
<b>,</b>		PERCENT	RECOVERY
SURROGATE		RECOVERY	LIMITS
2-Fluorophenol		74	(34 - 97)
Phenol-d5		74	(39 - 90)
Nitrobenzene-d5		73	(33 - 97)
2-Fluorobiphenyl		72	(39 - 91)
2,4,6-Tribromophenol		71	(29 - 95)
Terphenyl-d14		79	(30 - 102)

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

# LABORATORY CONTROL SAMPLE DATA REPORT

# GC/MS Semivolatiles

Client Lot #...: D1K120137 Work Order #...: EPDK41AC Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-202

Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Prep Batch #...: 1325202 Analysis Time..: 15:45

Dilution Factor: 1

	SPIKE	MEASURED		PERCENT	
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	METHOD
Acenaphthene	3330	2370	ug/kg	71	SW846 8270C
Pyrene	3330	2460	ug/kg	74	SW846 8270C
4-Chloro-3-methylphenol	5000	3650	ug/kg	73	SW846 8270C
2-Chlorophenol	5000	3720	ug/kg	74	SW846 8270C
1,4-Dichlorobenzene	3330	2240	ug/kg	67	SW846 8270C
2,4-Dinitrotoluene	3330	2430	ug/kg	73	SW846 8270C
4-Nitrophenol	5000	3390	ug/kg	68	SW846 8270C
N-Nitrosodi-n-propyl-	3330	2370	ug/kg	71	SW846 8270C
amine					
Pentachlorophenol	5000	3400	ug/kg	68	SW846 8270C
Phenol	5000	3680	ug/kg	74	SW846 8270C
1,2,4-Trichloro-	3330	2330	ug/kg	70	SW846 8270C
benzene					
		DEDCENT	PECOTERV		

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
2-Fluorophenol	74	(34 - 97)
Phenol-d5	74	(39 - 90)
Nitrobenzene-d5	. 73	(33 - 97)
2-Fluorobiphenyl	72	(39 - 91)
2,4,6-Tribromophenol	71	(29 - 95)
Terphenyl-d14	79	(30 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

# GC/MS Semivolatiles

Client Lot #...: D1K120137 Work Order #...: EPDK41AA Matrix.....: SOLID

MB Lot-Sample #: D1K210000-202

Prep Date....: 11/21/01 Analysis Time..: 15:22

Analysis Date..: 11/25/01 Prep Batch #...: 1325202

Dilution Factor: 1

		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Benzo(a) anthracene	ND	330	ug/kg	SW846 8270C
Benzo(b) fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k) fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
aphthalene	ND	330	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl)	ND	330	ug/kg	SW846 8270C
phthalate			3,3	
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C
	PERCENT	RECOVERY	<u>.</u>	
SURROGATE	RECOVERY	LIMITS		
2-Fluorophenol	71	(34 - 97	<u>')</u>	
Phenol-d5	69	(39 - 90	))	
Nitrobenzene-d5	70	(33 - 97		
2-Fluorobiphenyl	68	(39 - 91		
2,4,6-Tribromophenol	63	(29 - 95	-	
Terphenyl-d14	76	(30 - 10	-	

Calculations are performed before rounding to avoid round-off errors in calculated results.

# MATRIX SPIKE SAMPLE EVALUATION REPORT

# GC/MS Semivolatiles

Client Lot #...: D1K120137 Work Order #...: ENQ141AP-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-004 ENQ141AQ-MSD

 Date Sampled...:
 11/09/01 09:20
 Date Received...:
 11/10/01

 Prep Date.....:
 11/21/01
 Analysis Date...:
 11/25/01

 Prep Batch #...:
 1325202
 Analysis Time...:
 18:04

Dilution Factor: 1 % Moisture....: 18

	PERCENT	RECOVERY		RPD		
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHO	D
Acenaphthene	66	(49 - 93)	·		SW846	8270C
<u>-</u>	66	(49 - 93)	0.42	(0-40)	SW846	8270C
Pyrene	64	(48 ~ 97)			SW846	8270C
_	68	(48 - 97)	7.0	(0-40)	SW846	8270C
4-Chloro-3-methylphenol	67	(52 - 93)			SW846	8270C
	68	(52 - 93)	0.72	(0-40)	SW846	8270C
2-Chlorophenol	68	(51 - 91)			SW846	8270C
	69	(51 - 91)	1.6	(0-36)	SW846	8270C
1,4-Dichlorobenzene	62	(46 - 86)			SW846	8270C
	61	(46 - 86)	2.5	(0-40)	SW846	8270C
2,4-Dinitrotoluene	70	(53 - 105)			SW846	8270C
	66	(53 - 105)	5.6	(0-40)	SW846	8270C
4-Nitrophenol	58	(29 - 115)			SW846	8270C
	60	(29 - 115)	3.2	(0-40)	SW846	8270C
N-Nitrosodi-n-propyl-	67	(46 - 86)			SW846	8270C
amine						
	67	(46 - 86)	0.60	(0-40)	SW846	8270C
Pentachlorophenol	60	(27 - 97)			SW846	8270C
	64	(27 - 97)	6.1	(0-40)	SW846	8270C
Phenol	67	(50 - 90)			SW846	8270C
	67	(50 - 90)	0.48	(0-37)	SW846	8270C
1,2,4-Trichloro-	63	(49 - 90)			SW846	8270C
benzene						
	63	(49 - 90)	1.2	(0-40)	SW846	8270C
armno.a.mn		PERCENT		RECOVERY		
SURROGATE		RECOVERY		LIMITS	_	
2-Fluorophenol		68		(34 - 97)		
D) ] ]c		66		(34 - 97)		
Phenol-d5		67		(39 - 90)		
Nitrohannana de		65		(39 - 90)		
Nitrobenzene-d5		66		(33 - 97)		
2-Fluorobiphenyl		67		(33 - 97)		
z-rraoronthuenAr		65 65		(39 - 91)		
2 4 6 Tribromonhonel		65		(39 - 91)		
2,4,6-Tribromophenol		68		(29 - 95)		
		67		(29 - 95)		

(Continued on next page)

# MATRIX SPIKE SAMPLE EVALUATION REPORT

# GC/MS Semivolatiles

Client Lot #...: D1K120137 Work Order #...: ENQ141AP-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-004 ENQ141AQ-MSD

 SURROGATE
 PERCENT RECOVERY LIMITS

 Terphenyl-d14
 66 (30 - 102)

 67 (30 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### MATRIX SPIKE SAMPLE DATA REPORT

#### GC/MS Semivolatiles

Work Order #...: ENQ141AP-MS Matrix....: SOLID Client Lot #...: D1K120137

MS Lot-Sample #: D1K120137-004

ENQ141AQ-MSD

Date Sampled...: 11/09/01 09:20 Date Received..: 11/10/01

Prep Date....: 11/21/01

Analysis Date..: 11/25/01

Prep Batch #...: 1325202

Analysis Time..: 18:04

Dilution Factor: 1

% Moisture....: 18

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO	D
Acenaphthene	ND	3330	2210	ug/kg	66		SW846	8270C
<b>E</b>	ND	3330	2200	ug/kg	66	0.42	SW846	8270C
Pyrene	ND	3330	2120	ug/kg	64		SW846	8270C
•	ND	3330	2280	ug/kg	68	7.0	SW846	8270C
4-Chloro-3-methylphenol	ND	5000	3360	ug/kg	67		SW846	8270C
	ND	5000	3380	ug/kg	68	0.72	SW846	8270C
2-Chlorophenol	ND	5000	3380	ug/kg	68		SW846	8270C
<del>-</del>	ND	5000	3440	ug/kg	69	1.6	SW846	8270C
1,4-Dichlorobenzene	ND	3330	2070	ug/kg	62		SW846	8270C
	ND	3330	2020	ug/kg	61	2.5	SW846	8270C
2,4-Dinitrotoluene	ND	3330	2320	ug/kg	70		SW846	8270C
	ND	3330	2190	ug/kg	66	5.6	SW846	8270C
4-Nitrophenol	ND	5000	2920	ug/kg	58		SW846	8270C
	ND	5000	3010	ug/kg	60	3.2	SW846	8270C
N-Nitrosodi-n-propyl-	ND	3330	2250	ug/kg	67		SW846	8270C
amine								
•	ND	3330	2240	ug/kg	67	0.60	SW846	8270C
Pentachlorophenol	ND	5000	3010	ug/kg	60		SW846	8270C
	ND	5000	3200	ug/kg	64	6.1	SW846	8270C
Phenol	ND	5000	3330	ug/kg	67		SW846	8270C
	ND	5000	3350	ug/kg	67	0.48	SW846	8270C
1,2,4-Trichloro-	ND	3330	2110	ug/kg	63		SW846	8270C
benzene								
	ND	3330	2080	ug/kg	63	1.2	SW846	8270C
			PERCENT		RECOVERY			
SURROGATE			RECOVER	<u>Y</u>	LIMITS	_		
2-Fluorophenol			68		(34 - 97)			
			66		(34 - 97)			
Phenol-d5			67		(39 - 90)			
			65		(39 - 90)			
Nitrobenzene-d5			66		(33 - 97)			
			67		(33 - 97)			
2-Fluorobiphenyl			65		(39 - 91)			
			65		(39 - 91)			4
2,4,6-Tribromophenol			68		(29 - 95)			•

(Continued on next page)

(29 - 95)

67

#### GC/MS Semivolatiles

Client Lot #...: D1K120137 Work Order #...: ENQ141AP-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-004 ENQ141AQ-MSD

 SURROGATE
 PERCENT RECOVERY
 RECOVERY

 Terphenyl-d14
 66
 (30 - 102)

 67
 (30 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### TOTAL Metals

Client Lot #:	D1K120137			Matrix	: SOLID
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: Mercury	D1K130000-:	293 Prep Bar (82 - 113) Dilution Facto Analysis Time.		11/16/01	ENVAE1AC
LCS Lot-Sample#: Barium	D1K150000-4			11/20-11/21/01	EN2411AJ
Chromium	91	(88 - 110) Dilution Facto Analysis Time.	or: 1	11/20-11/21/01	EN2411AK
Silver	96	(88 - 108) Dilution Facto Analysis Time.		11/20-11/21/01	EN2411AL
Arsenic	88	(87 - 107) Dilution Facto Analysis Time.		11/20-11/21/01	EN2411AM
Cadmium	89	(89 - 109) Dilution Facto Analysis Time.		11/20-11/21/01	EN2411AN
Lead	90	(88 - 108) Dilution Facto Analysis Time.		11/20-11/21/01	EN2411AP
Selenium	86	(86 - 107) Dilution Facto Analysis Time.	r: 1	11/20-11/21/01	EN2411AQ

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

#### LABORATORY CONTROL SAMPLE DATA REPORT

#### TOTAL Metals

Client Lot #	‡: D1F	120137					Matrix:	SOLID
PARAMETER	SPIKE AMOUNT	MEASURE AMOUNT	ED UNITS	PERCNT RECVRY	METHOI	) 	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sam	ole#: D1K	130000-2	293 Prep Bat	ch #	: 13172	293		
Mercury	0.417	0.397	mg/kg Dilution Factor Analysis Time	95 :: 1		7471A	11/16/01	ENVAE1AC
ICC Tat Came	-1-#- D1#	150000 4	156 Prep Bat	ah #	. 1210/	156		
Barium	200	185	mg/kg Dilution Factor Analysis Time	92 :: 1		6010B	11/20-11/21/01	EN2411AJ
Chromium	20.0	18.3	mg/kg Dilution Factor Analysis Time		SW846	6010B	11/20-11/21/01	EN2411AK
Silver	5.00	4.78	mg/kg Dilution Factor Analysis Time		SW846	6010B	11/20-11/21/01	EN2411AL
Arsenic	200	176	mg/kg Dilution Factor Analysis Time		SW846	6010B	11/20-11/21/01	EN2411AM
Cadmium	5.00	4.45	mg/kg Dilution Factor Analysis Time		SW846	6010B	11/20-11/21/01	EN2411AN
Lead	50.0	45.0	mg/kg Dilution Factor Analysis Time		SW846	6010B	11/20-11/21/01	EN2411AP
Selenium	200	172	mg/kg Dilution Factor Analysis Time		SW846	6010B	11/20-11/21/01	EN2411AQ
NOTE(S):								

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### METHOD BLANK REPORT

#### TOTAL Metals

Client Lot #...: D1K120137 Matrix....: SOLID

		REPORTING		PREPARATION-		
PARAMETER	RESULT	LIMIT UNITS	METHOD	ANALYSIS DATE	ORDER #	
MD Lot Comp	10 #. D1V12000	0-293	. 1217202			
Mercury	le #: D1K13000 ND	0.033 mg/kg	SW846 7471A	11/16/01	ENVAE1AA	
ricicaly	112	Dilution Factor: 1	511010 /1/111	11/10/01	224 42 22 22 22	
		Analysis Time: 21:13	3			
MB Lot-Samp	le #: D1K15000	0-456 Prep Batch #	: 1319456			
Arsenic	ND	1.0 mg/kg	SW846 6010B	11/20-11/21/01	L EN2411AE	
		Dilution Factor: 1				
		Analysis Time: 14:36	5			
Barium	ND	1.0 mg/kg	SW846 6010B	11/20-11/21/03	EN2411AA	
		Dilution Factor: 1				
		Analysis Time: 14:36	5			
Cadmium	ND	0.50 mg/kg	SW846 6010B	11/20-11/21/01	EN2411AF	
		Dilution Factor: 1				
		Analysis Time: 14:36	i			
Chromium	ND	1.0 mg/kg	SW846 6010B	11/20-11/21/01	EN2411AC	
		Dilution Factor: 1				
		Analysis Time: 14:36				
Lead	ND	0.80 mg/kg	SW846 6010B	11/20-11/21/01	EN2411AG	
		Dilution Factor: 1				
		Analysis Time: 14:36				
Selenium	ND	1.3 mg/kg	SW846 6010B	11/20-11/21/01	EN2411AH	
		Dilution Factor: 1				
		Analysis Time: 14:36				
Silver	ND	1.0 mg/kg	SW846 6010B	11/20-11/21/01	EN2411AD	
		Dilution Factor: 1				
		Analysis Time: 14:36				
NOTE(S):						

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### TOTAL Metals

Client Lot :		20137 9/01 11:45 <b>Date Receiv</b> ed	i: 11/10/01	Matrix	: SOLID
PARAMETER	PERCENT RECOVERY	RECOVERY RPD LIMITS RPD LIMITS	METHOD	PREPARATION - ANALYSIS DATE	WORK ORDER #
MS Lot-Samp]	le #: D1K12	20137-010 Prep Batch #.	: 1319456	•	
Arsenic	92	(87 - 107)	SW846 6010B	11/20-11/21/01	-
	92	(87 - 107) 0.35 (0-20)  Dilution Factor: 1  Analysis Time: 14:5		11/20-11/21/01	ENQ2R1AW
Barium	90	(86 - 114)	SW846 6010B	11/20-11/21/01	ENQ2R1AN
	93	(86 - 114) 3.1 (0-20)	SW846 6010B	11/20-11/21/01	
		Dilution Factor: 1 Analysis Time: 14:5	4		
Cadmium	NC,MSB	(89 - 109)	SW846 6010B	11/20-11/21/01	ENQ2R1AX
	NC,MSB	(89 - 109) (0-20)	SW846 6010B	11/20-11/21/01	ENQ2R1A0
		Dilution Factor: 1 Analysis Time: 14:5	4		
Chromium	92	(88 - 110)	SW846 6010B	11/20-11/21/01	ENQ2R1AQ
	98	(88 - 110) 5.7 (0-20)  Dilution Factor: 1  Analysis Time: 14:5		11/20-11/21/01	ENQ2R1AR
Lead	NC,MSB	(88 - 108)	SW846 6010B	11/20-11/21/01	ENO2R1A1
	NC,MSB	(88 - 108) (0-20)  Dilution Factor: 1  Analysis Time: 14:5		11/20-11/21/01	ENQ2R1A2
Selenium	90	(86 - 107)	SW846 6010B	11/20-11/21/01	ENO2R1A3
	90	(86 - 107) 0.14 (0-20)	SW846 6010B	11/20-11/21/01	_
		Dilution Factor: 1 Analysis Time: 14:5	4		
Silver	97	(88 - 108)	SW846 6010B	11/20-11/21/01	ENQ2R1AT
	97	(88 - 108) 0.55 (0-20)	SW846 6010B	11/20-11/21/01	
		Dilution Factor: 1 Analysis Time: 14:5	4		
MOTTE (C)					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### TOTAL Metals

Client Lot #...: D1K120137 Matrix.....: SOLID

Date Sampled...: 10/30/01 11:24 Date Received..: 11/01/01

PERCENT RECOVERY RPD PREPARATION- WORK
PARAMETER RECOVERY LIMITS RPD LIMITS METHOD ANALYSIS DATE ORDER #

MS Lot-Sample #: D1K020140-023 Prep Batch #...: 1317293

Mercury 87 (82 - 113) SW846 7471A 11/16/01 EM81X1A2 85 (82 - 113) 2.7 (0-20) SW846 7471A 11/16/01 EM81X1A3

Dilution Factor: 1

Analysis Time..: 21:35

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

#### TOTAL Metals

Client Lot #...: D1K120137 Matrix..... SOLID Date Sampled...: 11/09/01 11:45 Date Received..: 11/10/01 SAMPLE SPIKE MEASURED PERCNT PREPARATION-WORK UNITS RECVRY RPD METHOD ANALYSIS DATE ORDER # PARAMETER AMOUNT AMT AMOUNT MS Lot-Sample #: D1K120137-010 Prep Batch #...: 1319456 Arsenic 11/20-11/21/01 ENQ2R1AV 1.9 200 185 mg/kg 92 SW846 6010B 1.9 200 186 mg/kg 92 0.35 SW846 6010B 11/20-11/21/01 ENQ2R1AW Dilution Factor: 1 Analysis Time..: 14:54 Barium 30.2 200 210 mg/kg 90 SW846 6010B 11/20-11/21/01 ENQ2R1AN 3.1 SW846 6010B 30.2 200 217 mq/kg 93 11/20-11/21/01 ENQ2R1AP Dilution Factor: 1 Analysis Time..: 14:54 Cadmium 5.00 26.5 mg/kg SW846 6010B 11/20-11/21/01 ENO2R1AX 34.8 Qualifiers: NC, MSB 34.8 5.00 21.7 SW846 6010B mg/kg 11/20-11/21/01 ENQ2R1A0 Qualifiers: NC, MSB Dilution Factor: 1 Analysis Time..: 14:54 Chromium 3.3 20.0 21.7 mg/kg 92 SW846 6010B 11/20-11/21/01 ENQ2R1AQ 3.3 20.0 23.0 mg/kg 98 5.7 SW846 6010B 11/20-11/21/01 ENQ2R1AR Dilution Factor: 1 Analysis Time..: 14:54 Lead 466 50.0 589 mg/kg SW846 6010B 11/20-11/21/01 ENQ2R1A1 Qualifiers: NC, MSB 466 50.0 538 mq/kq SW846 6010B 11/20-11/21/01 ENO2R1A2 Qualifiers: NC, MSB Dilution Factor: 1 Analysis Time..: 14:54 Selenium ND 200 180 mg/kg 90 SW846 6010B 11/20-11/21/01 ENQ2R1A3 ND 180 200 mq/kg 90 0.14 SW846 6010B 11/20-11/21/01 ENO2R1A4 Dilution Factor: 1 Analysis Time..: 14:54

(Continued on next page)

#### TOTAL Metals

Client Lot #...: D1K120137 Matrix....: SOLID

Date Sampled...: 11/09/01 11:45 Date Received..: 11/10/01

PARAMETER Silver		MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
DIIVCI	 5.00 5.00		mg/kg mg/kg	97 97	0.55	SW846 6010B SW846 6010B	11/20-11/21/01 11/20-11/21/01	
		Dilut	ion Factor: 1					

Analysis Time..: 14:54

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

NC The recovery and/or RPD were not calculated.

#### TOTAL Metals

Client Lot #...: D1K120137 Matrix.....: SOLID

Date Sampled...: 10/30/01 11:24 Date Received..: 11/01/01

SAMPLE SPIKE MEASURED PERCNT PREPARATION- WORK

PARAMETER AMOUNT AMT AMOUNT UNITS RECURVED METHOD ANALYSIS DATE ORDER #

PARAMETER AMOUNT AMT AMOUNT UNITS RECVRY RPD METHOD ANALYSIS DATE ORDER #

MS Lot-Sample #: D1K020140-023 Prep Batch #...: 1317293

Mercury

ND 0.417 0.387 mg/kg 87 SW846 7471A 11/16/01 EM81X1A2

ND 0.417 0.377 mg/kg 85 2.7 SW846 7471A 11/16/01 EM81X1A3

Dilution Factor: 1

Analysis Time..: 21:35

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

# HOLD TIME REPORT

# CAMERON-COLE LLC Wichita, KS

#### HOLD TIME REPORT

Lab: GCMS VOA

Lab ID #	Well ID	Collection Date	Method		Ext Hold	Ana Hold	Extraction Date	Analysis Date	<u>.</u>	Method Description
D1K120137001	B-56-3	11/09/01	08:30		_					
			8260B	10		14		11/19/01	20:05	AOV
1K120137002	B-56-16	11/09/01	08:45							
			8260B	10		14		11/19/01	14:57	VCA
O1K120137003	B-56-18	11/09/01	08:50							
			8260B	10		14		11/19/01	17:47	AOV
D1K120137004	B-48-3	11/09/01	09:20							
			8260B	10		14		11/19/01	20:31	AO.V
O1K120137005	B-48-14	11/09/01	09:40							
			8260B	. 10		14		11/19/01	15:49	AOA
01K120137006	B-48-18	11/09/01	09:45							
			8260B	10		14		11/19/01	18:12	VOA
01K120137007	B-50-4	11/09/01	10:30							
			8260B	10		14	F.	11/19/01	20:57	VOA
01K120137008	B-50-15	11/09/01	10:45							
			8260B	10		14		11/19/01	16:40	VOA
1K120137009	B-50-18	11/09/01	10:50							
			8260B	10		14		11/19/01	18:37	VCA
1K120137010	B-60-1	11/09/01	11:45							
			8260B	10		14		11/19/01	21:24	VOA
1K120137011	B-60-3	11/09/01	11:50							
			8260B	10		14		11/19/01	17:35	70A
01K120137012	B-60-16	11/09/01	12:10							
			8260B	10		14		11/19/01	17:55	VCA
01K120137013	B-54-4	11/07/01	07:40							
			8260B	11		14		11/18/01	62:36	75A
O1K120137014	B-54-17	11/07/01	08:00							
			8260B	11		14		11/18/01	13:32	VIA
D1K120137015	B-53-5	11/07/01	08:15							
			8260B	11		14		11/18/01	12:37	VCA
O1K120137016	B-53-17	11/07/01	08:45							
			8260B	11		14		11/19/01	03:55	AOV
O1K120137017	B-62-0.5	11/07/01	09:30							
			8260B	11		14		11/18/01	04:22	VOA
1K120137018	B-62-5	11/07/01	09:35							
			82.60B	11		14		11/18/01	04 : 4명	VOA
20137019	B-62-17	11/07/01	09:55				-			
			8260B	11		14		11/18/01	13:03	AOV
1K120137020	B-61-0.5	11/07/01	10:12							
	•		8260B	11		14		11/18/01	14:21	AOV

#### Wichita, KS

#### HOLD TIME REPORT

Lab: GCMS VOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif	Ana Hold	Extraction Date	Analysis Date		Method Description
D1K120137021	B-61-4	11/07/01 1	0:12							
			8260B		11	14		11/18/01	14:47	VOA
D1K120137022	B-61 <b>-</b> 18	11/07/01 1	0:40							
			8260B		12	14		11/19/01	12:44	VOA
D1K120137024	B-70-8	11/07/01 1	1:05							
			8260B		12	14		11/19/01	14:05	VOA

#### Wichita, KS

#### HOLD TIME REPORT

Lab: GCMS SEMIVOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif		Ana Hold	Extraction Date		Analysis Date		Method Description
D1K120137004	B-48-3	11/09/01 0	9:20									
			8270C	12	4	14	40	11/21/01	08:30	11/25/01	17:41	BNAs
D1K120137005	B-48-14	11/09/01 0	9:40									
			8270C	12	4	14	40	11/21/01	08:30	11/25/01	18:50	BNAs
D1K120137007	B-50-4	11/09/01 1	.0:30									
			8270C	12	4	14	40	11/21/01	08:30	11/25/01	19:13	BNAs
D1K120137008	B-50-15	11/09/01 1	.0:45									
			8270C	12	4	14	40	11/21/01	08:30	11/25/01	19:36	BNAs

#### Wichita, KS

#### HOLD TIME REPORT

Lab: METALS

Lab ID #	Well ID	Collection Date			na Ext if Hold	Ana Hold	Extraction Date	Analysis Date		Method Description
D1K120137010	B-60-1	11/09/01 11	.:45							
			6010B		12	180		11/21/01	14:45	ICP
			6010B		12	180		11/21/01	14:45	ICP
			7471A		7	28		11/16/01	21:41	
O1K120137011	B-60-3	11/09/01 11	:50							
			6010B		12	180		11/21/01	15:02	ICP
			6010B	,	12	180		11/21/01	15:02	ICP
			7471A		7	28		11/16/01	21:43	
O1K120137012	B-60-16	11/09/01 12	:10							
			6010B		12	180		11/21/01	15:07	ICP
			6010B		12	180		11/21/01		
			7471A		7	28		11/16/01	21:45	
1K120137013	B-54-4	11/07/01 07	:40			á				
			6010B		14	180		11/21/01	15:11	ICP
	•		6010B		20	180		11/27/01		
			6010B		14	180		11/21/01		
			7471A		9	28		11/16/01		
1K120137014	B-54-17	11/07/01 08	:00					11,10,01		
			6010B		1.4	180		11/21/01	15.15	TCP
			6010B		l 4	180		11/21/01		
			7471A		)	28		11/16/01		
1K120137017	B-62-0.5	11/07/01 09	: 30					11,10,01	_1.10	
			6010B		14	180		11/21/01	14.19	TOE
			6010B		14	180		11/21/01		
			7471A	,	9	28		11/16/01		10.
1K120137018	B-62-5	11/07/01 09	: 35					11/10/01	_1.50	
			6010B		L 4	180		11/21/01	15.30	ז <b>ר</b> ים
			6010B		L4	180		11/21/01		
			7471A .		)	28		11/16/01		
1K120137019	B-62-17	11/07/01 09	:55					11/10/01		
		,,	6010B		L4	180		11/21/01		7.78
			6010B	:	L 4	180		11/21/61		
			7471A	!	)	28		11/14/11		
1K120137020	B-61-0.5	11/07/01 10	:12					12/19/21	,	
			6010B	;	14	180		* *		1,12
			6010B	:	14	180		11/21/11		
			7471A	!	)	28		11/16 11		4
1K120137021	B-61-4	11/07/01 10	:12							
			6010B	:	_4	180		11/21/01	18.30	TOP
			6010B		.4	180		11/21/01		
			7471A		· ·	28		/-1/01	44	105

#### Wichita, KS

#### HOLD TIME REPORT

Lab: METALS

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif	Ext Hold	Ana Hold	Extraction Date	Analysis Date		Method Description
D1K120137022	B-61-18	11/07/01 1	0:40								
			6010B		14		180		11/21/01	15:49	ICP
			6010B		14		180		11/21/01	15:49	ICP
			7471A		9		28		11/16/01	22:01	
D1K120137023	B-70-0.5	11/07/01 1	1:30								
			6010B		14		180		11/21/01	15:53	ICP
			6010B		14		180		11/21/01	15:53	109
			7471A		9		28		11/16/01	22:03	
D1K120137024	B-70-8	11/07/01 1	1:05								
			6010B		14		180		11/21/01	15:57	ica
			6010B		14		180		11/21/01	15:57	ICP
			7471A		9		28		11/16/01	22:04	

# CAMERON-COLE LLC Wichita, KS

#### HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

Lab ID #	Well ID	Collectic Date	n Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date	Analysis Date		Method Descrip
D1K120137001	B-56-3	11/09/01	08:30								
			160.3 MOD		17		99		11/26/01	08:00	
D1K120137002	B-56-16	11/09/01	08:45								•
			160.3 MOD		17		99		11/26/01	08:00	
D1K120137004	B-48-3	11/09/01	09:20								
			160.3 MOD	•	17		99		11/26/01	08:00	
D1K120137005	B-48-14	11/09/01	09:40								
			160.3 MOD		17		99		11/26/01	08:00	
D1K120137007	B-50-4	11/09/01	10:30								
			160.3 MOD		17		99		11/26/01	08:00	
D1K120137008	B-50-15	11/09/01	10:45								
			160.3 MOD		17		99		11/26/01	15:00	
D1K120137010	B-60-1	11/09/01	11:45								
			160.3 MOD		17		99		11/26/01	15:00	
D1K120137011	B-60-3	11/09/01	11:50								
			160.3 MOD		17		99		11/26/01	15:00	
D1K120137012	B-60-16	11/09/01	12:10								
			160.3 MOD		17		99		11/26/01	15:00	
D1K120137013	B-54-4	11/07/01	07:40								
			160.3 MOD		19		99		11/26/01	15:30	
D1K120137014	B-54-17	11/07/01	00:90				,				
			160.3 MOD		19		99		11/26/01	. 1 : 0	
D1K120137015	B-53-5	11/07/01	08:15								
			160.3 MOD		19		99		11/26/01	18:14	
D1K120137016	B-53-17	11/07/01	08:45								
			160.3 MOD		19		99		11/26,31	15:00	
D1K120137017	B-62-0.5	11/07/01	09:30								
			160.3 MOD		19		99		11 (26 ) 1	1.:2	
D1K120137018	B-62 <b>-</b> 5		09:35								
			160.3 MOD		19		99		11/0e/11	1::37	
D1K120137019	B-62-17	11/07/01	09:55								
			160.3 MOD		19		99		11/16/11	15:36	
D1K120137020	B-61-0.5	11/07/01									
			160.3 MOD		19		99		11, 16/51	15:11	
D1K120137021	B-61-4	11/07/01									
			160.3 MOD		19		99		11/26/01	16:00	
D1K120137022	B-61 <b>-</b> 18	11/07/01									
D1 W1 001 27000	D 70 0 -		160.3 MOD		19		99		:: :· :	15:20	
D1K120137023	B-70-0.5	11/07/01			• •						
			160.3 MOD		19		99		1	1::30	

#### Wichita, KS

#### HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif		Extraction Date	Analysis Date		Method Description
D1K120137024	B-70-8	11/07/01 1	1:05							
			160.3 MOD		19	99		11/26/01	15:00	

# Chain of Custody Record



STL Denver 4955 Yarrow Street Arvada, CO 80002

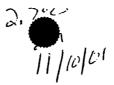


Severn Trent Laboratories, Inc.

Project Manager for Service (Wichita)   Discovery   Project Manager   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale   UCC   Discovery   Cameron - Cale	STL-4124 (0700) <b>DEN (0900)</b>																											
Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Telepholae Number   Tele	Client Cart - Klam (Lucal L) 7	$\mathcal{L} \cdot \mathcal{G} = \mathcal{L}$	Projec	t Manag	ger <b>A</b>	. /					_ (	هاري	//	; c		).	ŀ	Date //	/	9	10	/			-			
33 - 93 8 - 55 3	Address Address	MC. 140111	Teleph	one Nu	imber	(Area	Code)/	Fax N	vn <i>ere</i> Vumbe	<u>ГН</u> Г	- 4	J. E.	<u> </u>				-		<u> </u>			<u></u>	+	U	411	<u> </u>		
Contamers of Declar (Sulfs)   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks   Wicks	2549 North New York Aven	nur	303	-9	36.	<u>`22</u> .	35	`-/	/30	: <u>7</u> -	93	38-	٠٠٠-	2 کر	c									Page .	<u> </u>	of	<u>D</u>	
Project Name and Location (State)   Wich   M   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   State   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic   Malitic	City Nichita State Zip	Code 67219	Site Co	ontact Le	New	ta							_	r	Т													
ContractPurchase Order/Outset No. and Description   Conditions of Receipt	Project Name and Location (State)		Carne	r/Wayb	II Nur	nber							<b>∂</b>	ر ا							j		ļ					
Sample I.D. No. and Description   Date   Timo   3   4   5   5   5   5   5   5   5   5   5	Outrat Bushes Order Over No.	<u>/1</u> /		<del></del>	<u>-</u>								- 3	17	1/3/									İ				
B - 56 - 7	Contractification of the Contractification of the Contractification of the Contractification of the Contractification of the Contractification of the Contractification of the Contractification of the Contractification of the Contractification of the Contractification of the Contractification of the Contractification of the Contractification of the Contractification of the Contraction of the Contractification of the Co				Ma	trix										)									Conditi	OHS OF	Keceil	μ
R - 56 - 16		Date	Time	में	Aguecus	Sor!			HNOS	нСі	NaOH	ZnAc	ဒ္ဓ	L. L.	DAR													
B - 18		11/9/01	0830			X		X_					X										$\perp$					
B - 18	B-56-16		0845		ŀ	14	10	$\forall$					X				١,											
B - 48 - 3			0850		$\overline{\langle}$					X			X		1	4	1/2/											
B - 48 - 14			0920			X	/	<					X	N	iΧ													
B - 50 - 15	B-48-14		<del>                                     </del>			X	1	X.						1/4	X	44/	Wo.	`					$\top$	<b>-</b>				
B - 50 - 15	<del></del>		0945		X.					X					Ť		1		1				1				-	
B - 50 - 18			1030			义	,								X		1 1	2 01	1				1					
B - 50 - 18			1.			K		<del>`</del>						1/4	X	P	<del>ነ  '</del> የ		1				1					
B-60-3			1	1 .	X					X									1				$\top$					
B-60-3  B-60-16  Possible Hazard Identification  Non-Hazard   Flammable   Skin Irritant   Poison B   Unknown   Return To Client   Disposal By Lab   Archive For   Months   Influence   Archive For   Months   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Influence   Infl	R-60-1		1			X								_		T	T											
Disposal By Lab   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Months   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive For   Archive						X	1	χŢ					X	X	<u>'</u>		Ť						7					
Possible Hazard Identification    Non-Hazard	B-60-16	<b>V</b>	i				0								,								$\top$					
Non-Hazard   Flammable   Skin Irritant   Poison B   Unknown   Return To Client   Disposal By Lab   Archive For Months   longer than 3 months)  Turn Around Time Required   OC Requirements (Specify)    24 Hours   48 Hours   7 Days   14 Days   21 Days   Other      1 Relinquished By   Date   Time   1 Recovered By   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:   Image:					•										•	-		- 1-		(A I	ee m	av be a	asse	ssed if	samoles a	are retair	ned	
24 Hours   48 Hours   7 Days   14 Days   21 Days   Other   1 Recovered By   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate   1 Pate	<del></del>	Poison B	Unknow	$n \square$	Retu	rn To C	lient						Arc	hive	For			_ Mo	nths	long	ger th	an 3 n	nonth	ıs)				
1 Relinquished By Refund (1- Nottleth Date 11 Me) 1 Recovered By 11- Films 11/10/01 2930	•	iane 🗆 21 Di	D 01	har				10	C Req	uiren	ients	(Specii	ty)															
2. Relinquished By (1 "Nall(U)   11 M(r)   1800   3 and (1 - 4) and (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received By (1 - 10/01   2430)   2. Received B		14 = 103	Date	, ,				1.	Reco	voil i	3 <i>y</i> _	1/1		/	7		1 -		•							Tim	e	
2. Relinguished By ( 1 / 1 / 1 / Date Time 12. Received By Date Time	Jeffy a nelle	<u> </u>		<u>plej</u>			<u>U</u>					101-	- 5	20	m	مح	$t_{-}$											<u>, O</u>
	2 Relinquished By		Date			Time		2.	Recei	ived i	3 <i>y</i>		,											Date	•	Tim	e	
3. Relinquished By Date Time 3 Received By Date Time	3. Relinquished By		Date			Time		3	Rucei	ived i	Зу													Date	<del></del>	Tim	е	
On Mease Shitec + Kay Thus Ler immediately with any Que Vin	Please writect My Muscher		ntely w	iH.	91	y (	2	<u>)</u>	'n															<u> </u>		<u></u>		

# Chain of Custody Record

STL Denver 4955 Yarrow Street Arvada, CO 80002







STL-4124 (0700) DEN (0900)																r						10.		····	
Client L. L. M. J. C	1 .,	Project	Mana Z	ger	_	1	_		,			,	<i>}.</i> .	, ,	1		Date	1.1	/8/	101		Chi	ain of Custody N		
Dutety Neen Wichity Fa	estity	Telepho	(01)	/_/	44	Sih	70		<u> L C/1</u>	אניץר	ר רוט	20	<u>e</u>	<u></u>			Lab N			<i>C1</i>		-	04115	<u> </u>	
Client Sufety Ken Wichity Fa  Address  25 44 North New York  City  Wichity  Project Name and Location (State)	Ave	Site Co.	ne Ni }- 9	ımber 38	(Area · 5ら	35 35	)/Fax.i	30:	er - '- '	138	-5	52	0				Lau IV	иние				Pa	ge	. of	5
City State Zip	Code						Lab C	ontac	:1	,									h list i eeded						
Wichity KS	67214 <u> </u>	Rus					K	CE	70	rdC	<u>i`                                    </u>	_		-т	一"	lore	space	13 11	eedec	<del>"</del> —		$\vdash$			
Project Name and Location (State)		Carrieri	Wayb	ill Nun	nber								গ্ৰ	2							1 1				
Project Name and Location (State)  S-k-Wi(hitu Folcillty, W  Contract/Purchase Order/Quote No.	Chita, KS	L ₁											8760	10		ł			Ì	Ī			Special I Condition	nstructior s of Poor	
Contract/Purchase Order/Quote No.				Mat	rix				ntain eserv				7	4									Condition	S OF MEUC	πρι
Sample I.D. No. and Description (Containers for each sample may be combined on one line	Date	Time	A.if	Aqueaus	Soil		Unpres	HNOS H	Η̈́	NaOH	ZnAc/ NaOH			RCAN Meruls											
B-34-4	11/3/01	0740			X		$\chi$						X	X											
B-53-5	11/7/01	0800			X		1						X	X			<u> </u>								
R-63-5	11/7/01	0815			X		X			_			4		$\perp$		<u> </u>			$\perp$					
19-57-12	11/7/01	0845			1	-	X			_			<u>X</u>				<b>.</b>								
B-62-0.5	11/7/09	0930			<u> </u>		X					-	<del></del> 1	(							_				
B-62-5	11/7/01	0935	.		X		ΧL			-			<u> </u>	X	_	<u>.</u>					<u> </u>				
B-61-17	11/1/01	0155			X	Ш	X		<u> </u>				Х	X	$\perp$	_	_	_			_				
B-61-0.5 ·	11/7/0)	1012.	_		X		<u>'(                                    </u>	_	_	1			X	X			╽.				_				
B-61-4.	11/7/01	1012	_		<u> </u>		χĹ			_	-		X	X	_	_				_	ļ				
B-61-18 ·	11/7/01	1040			X		X	_			-		X	X	_	1				_	_				<del></del>
B-76-625	11/10	1150	_	_	X		ΧĹ		_	╽	-		By	X	482	11/	12/14	ļ		_	-	_			
B-76-5	11/4/07	1105			X		<u> </u>	$\bot$					X.	X						_		L			
Possible Hazard Identification		_	١	imple l 1 _	•		EZ.	<b>&gt;</b>											(A lee	e may	be as	sesse	ed if samples are	retained	
✓ Non-Hazard ☐ Flammable ☐ Skin Irritant  Turn Around Time Required	Poison B	Unknown	_	Retu	rn To	Client			posal		ab Is (Spi			ive F	or		_ Moi	ntns	longe	er tnan	1 3 mo	nins)			
24 Hours 48 Hours 7 Days 14 L	Davs 1 21 Day	/s 🔲 011.	er				_   `	20 110	-qimo		is (Opi	cony													
1 Relinquished By 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Date /	7		Time 14	(K)	1	Rec	CA	I-BY	15	2		1	_						···.		Date 11/10/01	Time 093	0
2. Relinquished By		Date	<i>[C]</i>		Time				ceived		613	17	<i>C71</i>	<i>'''</i>						<del></del>			Date	Time	
" / · · · ·																									
3 Relinquished By		Date			Time		3	Red	ceived	Ву					_	_	_						Date	Time	
Comments  N P   FIGS CALL KAY  STRIBUTION: WHITE - Stays with the Sample, CANA	Tauscher	in	iγr	ـــــــــــــــــــــــــــــــــــــ	C//7	0/y	w	- j f	4	61	ny	, <i>i</i>	<u> </u>	129	17	an	ر م					l		· · · · · · · · · · · · · · · · · · ·	



STL Denver

4955 Yarrow Street Arvada, CO 80002-4517

Tel: 303 736 0100 Fax: 303 431 7171 www.stl-inc.com

# ANALYTICAL REPORT

REVISED

#### SAFETY KLEEN (WICHITA, KS)

Lot #: D1K120223

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue, Suite 100 Boulder, CO 80301

cc: Will Huskie

SEVERN TRENT LABORATORIES, INC.

Kae E. Yoder
Project Manager

January 15, 2002

This report shall not be reproduced except in full, without the written approval of the laboratory

## **Table Of Contents**

### Standard Deliverables

### **Report Contents**

# Total Number of Pages

#### Standard Deliverables

The Cover Letter and the Report Cover page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.

78

- Table of Contents
- Case Narrative
- Executive Summary Detection Highlights
- Methods Summary
- Method/Analyst Summary
- Lot Sample Summary
- Analytical Results
- QC Data Association Summary
- Hold Time Report
- Chain-of-Custody

#### **CASE NARRATIVE**

REVISE

Client Name:

Safety-Kleen (Wichita)

Project Name: Project Number:

Sample Delivery Group:

D1K120223

Original Narrative Date: Revised Narrative Date:

12/05/01 01/15/02

#### Sample Receipt

- Fourteen solid samples and three water samples, submitted by Safety-Kleen (Wichita), Inc., were received by STL Denver on November 10, 2001, according to documented sample acceptance procedures. The samples were received intact at temperatures of 2.7°C, 4.5°C and 3.8°C. Analyses requested on the associated chains-of-custody are as follows: GC/MS Volatiles, GC/MS Semivolatiles and Total Metals.
- The samples were received at the laboratory without corresponding chains-of-custody. The client was notified and submitted the chains-of-custody via facsimile transmission on November 12, 2001.
- Discrepancies were noted between the analyses requested on the chains-of-custody and the analyses requested on the sample container labels. As instructed by the client on November 12, 2001, analyses were performed per the chain-of-custody. No other anomalies were encountered during sample receipt.

#### **GC/MS** Volatiles

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
B-79-20	cis-1,2-Dichloroethene	430	29	ug/L
	Tetrachloroethene	490	29	ug/L
	Trichloroethene	48	29	ug/L
	! Vinyl chloride	80	29	ug/L
B-81-20	1,1-Dichloroethane	38	1.0	ug/L
	cis-1,2-Dichloroethene	6.5	1.0	ug/L
	Tetrachloroethene	42	1.0	ug/L
	1,1,1-Trichloroethane	2.7	1.0	ug/L
	Trichloroethene	15	1.0	ug/L
B-100-4	cis-1,2-Dichloroethene	29	12	ug/kg
	Tetrachloroethene	550	25	ug/kg
	Trichloroethene	120	25	ug/kg
B-100-15	Tetrachloroethene	59	5.0	ug/kg
·	Trichloroethene	8.3	5.0 i	ug/kg
B-102-18	Tetrachloroethene	40	1.0	ug/L
	1,1,1-Trichloroethane	2.4	1.0	ug/L
<u> </u>	Trichloroethene	1.6	1.0	ug/L

- > The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to analytes present above the linear calibration curve, sample B-79-20 had to be analyzed at a 1:28.57 dilution, and sample B-100-4 had to be analyzed at a 1:5 dilution. The reporting limits have been adjusted relative to the dilution required.

#### **GC/MS** Semivolatiles

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs. The samples were analyzed within holding time and without incident.

#### **Total Metals**

- > Sample analysis revealed detectable concentrations at or above Safety-Kleen (Wichita)'s RLs, as detailed in the Executive Summary-Detection Highlights Report. The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Client specific, as well as, standard batch MS/MSDs have been provided. All spike parameters were within QC control limits with the exception of the item noted in the following table. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

	QC Batch/	MS	MSD	Recovery		RPD
Parameter	Specific Sample	%Rec	%Rec	Limits	RPD	Limits
Mercury	B-64-0.5	76	85	82-113	7.9	0-20

#### **Revisions**

The revisions included in this report are as follows:

- 1. GC/MS Semivolatiles Additional compounds, bis (2-Ethylhexyl) phthalate and Dimethyl phthalate, have been reported for samples B-100-4 and B-100-15, as requested.
- 2. GC/MS Semivolatiles As requested, the laboratory looked for any detectable concentrations present above the method detection limit (MDL) but below the reporting limit. None were found. The MDLs have been printed on the analytical data pages.

These data and reporting limits are being used specifically to meet the needs of this project. All RLs are supported by STL Denver's Method Detection Limits (MDLs). Reporting limits in this report are at or above the MDL.

I certify that the data presented in this report are accurate, complete, and meets the minimum quality assurance standards in 40-CFR 136, 40-CFR 141, and/or SW846. The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. An assessment of the quality of the data, noting any exceptions, outliers, and/or problems encountered have been narrated herein.

Kae F. Yoder

Project Manager

Date

#### D1K120223

	·	REPORTI	NG	ANALYTICAL
PARAMETER	RESULT	LIMIT	UNITS	METHOD
	•			
B-64-0.5 11/08/01 15:15 001				,
Mercury	0.16	0.033	mg/kg	SW846 7471A
Arsenic	12.4	1.0	mg/kg	SW846 6010B
Cadmium	3.2	0.50	mg/kg	SW846 6010B
Lead	170	0.80	mg/kg	SW846 6010B
Selenium	2.8	1.3	mg/kg	SW846 6010B
Barium	59.8	1.0	mg/kg	SW846 6010B
Chromium	17.3	1.0	mg/kg	SW846 6010B
. Percent Moisture	11.9	0.10	ક	MCAWW 160.3 MOD
B-64-3 11/08/01 15:20 002		**		
Arsenic	9.4	1.0	mg/kg	SW846 6010B
Lead	10.8	0.80	. mg/kg	SW846 6010B
Barium	126	1.0	mg/kg	SW846 6010B
Chromium	18.8	1.0	mg/kg	SW846 6010B
Percent Moisture	25.5	0.10	ક	MCAWW 160.3 MOD
B-64-16 11/08/01 15:30 003				
		٠,		
Arsenic	1.5	1.0	mg/kg	SW846 6010B
Lead	2.7	0.80	mg/kg	SW846 6010B
Barium	52.5	1.0	mg/kg	SW846 6010B
. Chromium	3.9	1.0	mg/kg	SW846 6010B
Percent Moisture	18.3	0.10	8	MCAWW 160.3 MOD
	*		•	
B-65-0.5 11/08/01 15:40 004				
Mercury	0.18	0.033	mg/kg	SW846 7471A
Arsenic	11.8	1.0	mg/kg	SW846 6010B
Cadmium	5.0	0.50	mg/kg	SW846 6010B
Lead	308	0.80	mg/kg	SW846 6010B
Selenium	2.7	1.3	mg/kg	SW846 6010B
Barium	.109	1.0	mg/kg	SW846 6010B
Chromium	13.6	1.0	mg/kg	SW846 6010B
Percent Moisture	8.0	0.10	8	MCAWW 160.3 MOD
		· ·		
B-65-3 11/08/01 15:40 005		•		,
		* .	-	. •
Arsenic	5.5	1.0	mg/kg	SW846 6010B
Cadmium	1.5	0.50	mg/kg	SW846 6010B
Lead	39.8	0.80	mg/kg	SW846 6010B
Barium	180	1.0	mg/kg	SW846 6010B
Chromium	21.3	1.0	mg/kg	SW846 6010B
			· J · · · · · ·	= 7.0 20 00 20 20

(Continued on next page)

#### D1K120223

	•			
		REPORTI	1G	ANALYTICAL
PARAMETER	RESULT	LIMIT	UNITS	METHOD
•				
B-65-3 11/08/01 15:40 005			•	•
Percent Moisture	26.6	0.10	8	MCAWW 160.3 MOD
B-65-16 11/08/01 15:55 006		. 4		
Arsenic	n m '		/2	
Lead	1.7	1.0	mg/kg	SW846 6010B
Barium	3.3	0.80	mg/kg	SW846 6010B
Chromium	34.2	1.0	mg/kg	SW846 6010B
	4.5	1.0	mg/kg	SW846 6010B
Percent Moisture	15.6	0.10	<b>8</b>	MCAWW 160.3 MOD
B-66-0.5 11/08/01 16:30 007				
Mercury	0.12	0.033	mg/kg	SW846 7471A
Arsenic	92.3	1.0	mg/kg	SW846 6010B
Lead	156	0.80	mg/kg	SW846 6010B
Selenium	5.6	1.3	mg/kg	SW846 6010B
Barium	143	1.0	mg/kg	SW846 6010B
Chromium	31.0	1.0	mg/kg	SW846 6010B
Percent Moisture	11.3	0.10	1119/129 8	MCAWW 160.3 MOD
B-66-3 11/08/01 16:30 008				
Arsenic	5.7	1.0	mg/kg	SW846 6010B
Cadmium	1.5	0.50	mg/kg	SW846 6010B
Lead	69.3 ,	0.80	mg/kg	SW846 6010B
Barium	155	1.0	mg/kg	SW846 6010B
Chromium	15.4	1.0	mg/kg	SW846 6010B
Percent Moisture	17.2	0.10	% %	MCAWW 160.3 MOD
B-66-16 11/08/01 16:40 009			~	
				•
Arsenic	1.5	1.0	mg/kg	SW846 6010B
Lead	3.3	0.80	mg/kg	SW846 6010B
Barium	37.9	1.0	mg/kg	SW846 6010B
Chromium	4.2	1.0	mg/kg	SW846 6010B
Percent Moisture	7.2	0.10	ક	MCAWW 160.3 MOD
B-67-0.5 11/08/01 16:50 010				
Mercury	0.053	0.033	ma /1	CHOAC TARR
Arsenic	15.0	1.0	mg/kg	SW846 7471A
Cadmium	4.0		mg/kg	SW846 6010B
Lead		0.50	mg/kg	SW846 6010B
Tear	49.5	0.80	mg/kg	SW846 6010B

(Continued on next page)

#### D1K120223

			REPORTING	3	ANALYTICAL
	PARAMETER	RESULT	LIMIT	UNITS	METHOD
B-67-0	.5 11/08/01 16:50 010				
	Selenium				
		4.9	1.3	mg/kg	SW846 6010B
	Barium	93.8	1.0	mg/kg	SW846 6010B
	Chromium	17.4	1.0	mg/kg	SW846 6010B
	Percent Moisture	7.5	0.10	ું •	MCAWW 160.3 MOD
B-67-3	11/08/01 16:50 011				
		•			
	Arsenic	11.2	1.0	mg/kg	SW846 6010B
	Cadmium	3.8	0.50	mg/kg	SW846 6010B
	Lead	299	0.80	mg/kg	SW846 6010B
	Selenium	1.9	1.3	mg/kg	SW846 6010B
	Barium	115	1.0	mg/kg	SW846 6010B
	Chromium	15.0	1.0	mg/kg	SW846 6010B
	Percent Moisture	17.5	0.10	8	MCAWW 160.3 MOD
		•			
B-67-1	6 11/08/01 16:55 012				
	Arsenic				•
*	Lead	2.1	1.0	mg/kg	SW846 6010B
	Barium	6.1	0.80	mg/kg	SW846 6010B
		55.6	1.0	mg/kg	SW846 6010B
	Chromium	11.9	1.0	mg/kg	SW846 6010B
•	Percent Moisture	17.3	0.10	%	MCAWW 160.3 MOD
B-79-20	0 11/08/01 13:35 013				<b>:</b>
	cis-1,2-Dichloroethene	430	29	ug/L	SW846 8260B
	Tetrachloroethene	490	29	ug/L	SW846 8260B
•	Trichloroethene	48	29	ug/L	SW846 8260B
	Vinyl chloride	80	29	ug/L	SW846 8260B
D 01 00	77/00/05 50 50		•		
B-8T-20	11/08/01 14:30 014		•		•
	1,1-Dichloroethane	38	1.0	ug/L	SW846 8260B
	cis-1,2-Dichloroethene	6.5	1.0	ug/L	SW846 8260B
	Tetrachloroethene	42	1.0	ug/L	SW846 8260B
	1,1,1-Trichloroethane	2.7	1.0	ug/L	SW846 8260B
	Trichloroethene	15	1.0	ug/L	SW846 8260B
				49/1	54040 BZ00B
B-100-4	11/09/01 13:30 015			•	* : : : : : : : : : : : : : : : : : : :
	cis-1,2-Dichloroethene	29	12	ug/kg	SW846 8260B
	Tetrachloroethene	550	25	ug/kg ug/kg	SW846 8260B
	Trichloroethene	120	25	<del>-</del>	SW846 8260B . SW846 8260B
				~3/ 1/3	, 0040 02000

#### D1K120223

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
B-100-4 11/09/01 13:30 015		• .		
Percent Moisture	22.2	0.10	ે	MCAWW 160.3 MOD
B-100-15 11/09/01 13:45 016	•			
Tetrachloroethene Trichloroethene Percent Moisture	59 8.3 7.7	5.0 5.0 0.10	ug/kg ug/kg %	SW846 8260B SW846 8260B MCAWW 160.3 MOD
B-102-18 11/09/01 14:50 017				
Tetrachloroethene 1,1,1-Trichloroethane Trichloroethene	40 2.4 1.6	1.0 1.0 1.0	ug/L ug/L ug/L	SW846 8260B SW846 8260B SW846 8260B

### **METHODS SUMMARY**

#### D1K120223

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

#### References:

MCAWW	"Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.
SW846	"Test Methods for Evaluating Solid Waste, Physical/Chemical

### **METHOD / ANALYST SUMMARY**

#### D1K120223

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 160.3 MOD	Nathan Lovstad	000090
SW846 6010B	Lynn-Anne Trudell	006645
SW846 7471A	Thomas Lill	006929
SW846 8260B	Dan Appelhans	001008
SW846 8260B	Mike G. Hoffman	001880
SW846 8270C	Xiayasang Leewaphath	006600
References:		•
	for Chemical Analysis of Water and Wastes", 4-79-020, March 1983 and subsequent revisions.	
	thods for Evaluating Solid Waste, Physical/Chemic, Third Edition, November 1986 and its updates.	cal

#### **SAMPLE SUMMARY**

#### D1K120223

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
D. TD 0 3				
ENR23	001	B-64-0.5	11/08/01	15:15
ENR24	002	B-64-3	11/08/01	15:20
ENR25	003	B-64-16	11/08/01	15:30
ENR26	004	B-65-0.5	11/08/01	
ENR28	005	B-65-3	11/08/01	
`ENR29	006	B-65-16	11/08/01	
ENR3A	007	B-66-0.5	11/08/01	
ENR3C	008	B-66-3	11/08/01	
ENR3E	009	B-66-16	11/08/01	
ENR3F	010	B-67-0.5	11/08/01	
ENR3G	011	B-67-3	• •	
ENR3H	012	B-67-16	11/08/01	
ENR3L	013	B-79-20	11/08/01	
ENR3N	014	B-81-20	11/08/01	
ENR3P	015	B-100-4	11/08/01	
	_		11/09/01	
ENR3R	016	B-100-15	11/09/01	13:45
ENR3T	017	B-102-18	11/09/01	14:50
**	100			

#### NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Client Sample ID: B-79-20

#### GC/MS Volatiles

Lot-Sample #...: D1K120223-013 Work Order #...: ENR3L1AA Matrix..... WATER

 Date Sampled...:
 11/08/01
 13:35
 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324405
 Analysis Time...:
 11:33

Dilution Factor: 28.57

Method..... SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	29	ug/L
Bromobenzene	ND	29	ug/L
Bromochloromethane	ND	29	ug/L
Bromodichloromethane	ND	29 .	ug/L
Bromoform	ND · ·	29	ug/L
Bromomethane	ND	57	ug/L
n-Butylbenzene	ND	29	ug/L
sec-Butylbenzene	ND	29	ug/L
tert-Butylbenzene	ND	29	ug/L
Carbon tetrachloride	ND	29	ug/L
Chlorobenzene	ND	29	ug/L
Chlorodibromomethane	ND	29	ug/L
Chloroethane	ND	57	ug/L
Chloroform	ND	29	ug/L
Chloromethane	ND	57	ug/L
2-Chlorotoluene	ND	29	ug/L
4-Chlorotoluene	ND	29	ug/L
Dibromomethane	ND	29	ug/L
1,2-Dichlorobenzene	ND ·	29	ug/L
1,3-Dichlorobenzene	ND	29 ·	ug/L
1,4-Dichlorobenzene	ND	29	ug/L
Dichlorodifluoromethane	ND	57	ug/L
1,1-Dichloroethane	ND	29	ug/L
1,2-Dichloroethane	ND	29	ug/L
1,1-Dichloroethene	ND	29	ug/L
cis-1,2-Dichloroethene	430	29	ug/L
trans-1,2-Dichloroethene	ND	14	ug/L
1,2-Dichloropropane	ND	29	ug/L
1,3-Dichloropropane	ND	29	ug/L
2,2-Dichloropropane	ND	140	ug/L
1,1-Dichloropropene	ND	29	ug/L
Ethylbenzene	ND	29	ug/L
Trichlorofluoromethane	ND	57	ug/L
Hexachlorobutadiene	ND	29	ug/L
Isopropylbenzene	ND	29	ug/L
p-Isopropyltoluene	ND	29	ug/L
Methylene chloride	ND	29	ug/L
Naphthalene	ND	29	ug/L

(Continued on next page)

### Client Sample ID: B-79-20

### GC/MS Volatiles

Lot-Sample #: D1K120223-013	Work Order #	: ENR3L1AA	Matrix.	<b>:</b>	WATER
		REPORTING			
PARAMETER	RESULT	LIMIT	UNITS		
n-Propylbenzene	ND	29	ug/L	_	
Styrene	ND	29	ug/L		
1,1,1,2-Tetrachloroethane	ND	29	ug/L		
1,1,2,2-Tetrachloroethane	ND	29	ug/L		
. Tetrachloroethene	490	29	ug/L		
Toluene	ND	29	ug/L		
1,2,3-Trichlorobenzene	ND	29	ug/L		÷ V
1,2,4-Trichloro- benzene	ND	29	ug/L		
· · · · · · · · · · · · · · · · · · ·		et i			
1,1,1-Trichloroethane	ND	29	ug/L		
1,1,2-Trichloroethane Trichloroethene	ND	29	ug/L		
	48	29	`ug/L		
1,2,3-Trichloropropane	ND	29	ug/L		
1,2,4-Trimethylbenzene	ND	29	ug/L		
1,3,5-Trimethylbenzene	ND	29	ug/L		
Vinyl chloride	80	29	ug/L		
o-Xylene	ND	29	ug/L		
m-Xylene & p-Xylene	ND	57	ug/L		
1,2-Dibromo-3-	ND	57	ug/L	_	
chloropropane (DBCP)				,	
1,2-Dibromoethane (EDB)	ND	29 ·	ug/L		
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane .	102	(80 - 120)			
1,2-Dichloroethane-d4	99 .	(72 - 127)			
4-Bromofluorobenzene	100	(79 - 119)			
Toluene-d8	103	(79 - 119)			

#### Client Sample ID: B-81-20

#### GC/MS Volatiles

Lot-Sample #...: D1K120223-014 Work Order #...: ENR3N1AA Matrix..... WATER

 Date Sampled...:
 11/08/01 14:30 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324405 Analysis Time...:
 11:54

Dilution Factor: 1

Method..... SW846 8260B

		REPORTING	}
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L ·
n-Butylbenzene	ND	. 1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND .	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND .	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	38	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	6.5	1.0	ug/L
trans-1,2-Dichloroethene	· ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND ·	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND .		

(Continued on next page)

### Client Sample ID: B-81-20

#### GC/MS Volatiles

Lot-Sample #: D1K120223-014	Work Order #	ENR3N1AA	Matrix: WATER
		REPORTING	
DADAMETED	DEGITE III		

	•	REPORTIN	IG	
PARAMETER	RESULT	LIMIT	UNITS	
n-Propylbenzene	ND	1.0	ug/L	_
Styrene	ND	1.0	ug/L	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	
Tetrachloroethene	42	1.0	ug/L	
Toluene	ND	1.0	ug/L	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	
1,2,4-Trichloro-	ND	1.0	ug/L	
benzene			<b>3</b> 7 –	
1,1,1-Trichloroethane	2.7	1.0	ug/L	
1,1,2-Trichloroethane	ND	1.0	ug/L	
Trichloroethene	15	1.0	ug/L	
1,2,3-Trichloropropane	ND	1.0	ug/L	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	
Vinyl chloride	ND	1.0	ug/L	
o-Xylene	ND	1.0	ug/L	
m-Xylene & p-Xylene	ND	2.0	ug/L	
1,2-Dibromo-3-	ND	2.0	ug/L	
chloropropane (DBCP)			J. –	
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	
•			, <b>3</b> , -	
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS	•	
Dibromofluoromethane	106	(80 - 120	<u> </u>	
1,2-Dichloroethane-d4	106	(72 - 12		
4-Bromofluorobenzene	103	(79 - 119		
Toluene-d8	99	179 - 110	,	

SURROGATE	RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	 106	(80 - 120)
1,2-Dichloroethane-d4	106	(72 - 127)
4-Bromofluorobenzene	 103	(79 - 119)
Toluene-d8	99	(79 - 119)

#### Client Sample ID: B-100-4

#### GC/MS Volatiles

Lot-Sample #...: D1K120223-015 Work Order #...: ENR3P1AA Matrix.....: SOLID

 Date Sampled...:
 11/09/01
 13:30
 Date Received...:
 11/10/01

 Prep Date.....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325482
 Analysis Time...:
 20:34

Dilution Factor: 5

**% Moisture....:** 22 **Method.....:** SW846 8260B

		REPORTING	J
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	25	ug/kg
Bromobenzene	ND	25	ug/kg
Bromochloromethane	ND	25	ug/kg
Bromodichloromethane	ND	25	ug/kg
Bromoform	ND	25	ug/kg
Bromomethane	ND	50	ug/kg
n-Butylbenzene	ND -	25	ug/kg
sec-Butylbenzene	ND	25	ug/kg
tert-Butylbenzene	ND	25	ug/kg
Carbon tetrachloride	ND	25	ug/kg
Chlorobenzene	ND	25	ug/kg
Chlorodibromomethane	ND	25	ug/kg
Chloroethane	ND	50	ug/kg
Chloroform	ND	50	ug/kg
Chloromethane	ND	50	ug/kg
2-Chlorotoluene	ND	25	ug/kg
4-Chlorotoluene	ND .	25	ug/kg
1,2-Dibromo-3-	ND	50	ug/kg
chloropropane (DBCP)	w.		J. J
1,2-Dibromoethane (EDB)	ND	25	ug/kg
Dibromomethane	ND	25	ug/kg
1,2-Dichlorobenzene	ND	25	ug/kg
1,3-Dichlorobenzene	ND.	25	ug/kg
1,4-Dichlorobenzene	ND	25	ug/kg
Dichlorodifluoromethane	ND	50	ug/kg
1,1-Dichloroethane	ND	25	ug/kg
1,2-Dichloroethane	ND	25 .	ug/kg
cis-1,2-Dichloroethene	29	12	ug/kg
trans-1,2-Dichloroethene	ND .	12	ug/kg
1,1-Dichloroethene	ND	25 .	ug/kg
1,2-Dichloropropane	ND	25	ug/kg
1,3-Dichloropropane	ND .	25	ug/kg
2,2-Dichloropropane	ND	25	ug/kg
1,1-Dichloropropene	ND	25	ug/kg
Ethylbenzene	ND	25	ug/kg
Hexachlorobutadiene	ND	25	ug/kg
Isopropylbenzene	ND	25	ug/kg
p-Isopropyltoluene	ND	25	ug/kg

(Continued on next page)

### Client Sample ID: B-100-4

#### GC/MS Volatiles

Lot-Sample #: D1K120223-015	Work Order #	: ENR3P1AA	Matrix SOLID
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	25	ug/kg
Naphthalene	ND .	25	ug/kg
n-Propylbenzene	ND	25 .	ug/kg
Styrene	ND	25	ug/kg
1,1,1,2-Tetrachloroethane	ND	25	ug/kg
1,1,2,2-Tetrachloroethane	ND	25	ug/kg
Tetrachloroethene	550	25	ug/kg
Toluene	ND	25	ug/kg
1,2,3-Trichlorobenzene	ND	25	ug/kg
1,2,4-Trichloro- benzene	ND	25	ug/kg
1,1,1-Trichloroethane	ND	25	ug/kg
1,1,2-Trichloroethane	ND	25	ug/kg
Trichloroethene	120	25	ug/kg
Trichlorofluoromethane	ND	50	ug/kg
1,2,3-Trichloropropane	ND	25	ug/kġ
1,2,4-Trimethylbenzene	ND	25	ug/kg
1,3,5-Trimethylbenzene	ND	25	ug/kg
Vinyl chloride	ND	25	ug/kg
m-Xylene & p-Xylene	ND	12	ug/kg
o-Xylene	ND .	12	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	113	(80 - 120)	
1,2-Dichloroethane-d4	114	(79 - 125)	•
4-Bromofluorobenzene	106 .	(71 - 132)	
Toluene-d8	96	(77 - 117)	:

### Client Sample ID: B-100-15

### GC/MS Volatiles

Lot-Sample #...: D1K120223-016 Work Order #...: ENR3R1AA Matrix...... SOLID

 Date Sampled...:
 11/09/01
 13:45
 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1325469
 Analysis Time...:
 19:38

Dilution Factor: 1

* Moisture....: 7.7 Method.....: SW846 8260B

		,	
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND ·	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg ·
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)	,		
1,2-Dibromoethane (EDB)	ND	5.0°	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND .	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

(Continued on next page)

# Client Sample ID: B-100-15

# GC/MS Volatiles

Lot-Sample #: D1K120223-016	Work Order #: E	NR3R1AA	Matrix:	SOLID
	· · · · · ·	,	•	

•		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	59	5.0	ug/kgʻ
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND .	5.0	ug/kg
1,2,4-Trichloro- benzene	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	8.3	5.0	ug/kg
Trichlorofluoromethane	ND ·	10	ug/kg
1,2,3-Trichloropropane	ND .	5.0	ug/kg
1,2,4-Trimethylbenzene	ND .	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane.	103	(80 - 120)	
1,2-Dichloroethane-d4	104	(79 - 125)	
4-Bromofluorobenzene	98	(71 - 132)	
Toluene-d8	88	(77 - 117)	

# Client Sample ID: B-102-18

### GC/MS Volatiles

Lot-Sample #...: D1K120223-017 Work Order #...: ENR3T1AA Matrix...... WATER

 Date Sampled...:
 11/09/01 14:50 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324405 Analysis Time...:
 12:16

Dilution Factor: 1

Method.....: SW846 8260B

		REPORTIN	G .
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND .	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L'
1,3-Dichlorobenzene	· ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND .	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	, ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND °	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L

(Continued on next page)

# Client Sample ID: B-102-18

# GC/MS Volatiles

not-sample #: DIKI202	23-017 Work Order	#:	ENR3T1AA	Matrix:	WATER
					,

		REPORTING	a.
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L -
1,1,1,2-Tetrachloroethane	" ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0 '	ug/L
Tetrachloroethene	40	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	2.4	1.0	ug/L
1,1,2-Trichloroethane .	ND .	1.0	ug/L
Trichloroethene	1.6	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3- chloropropane (DBCP)	ND	2.0	ug/L
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	103	(80 - 120)	
1,2-Dichloroethane-d4	99	(72 - 127)	•
4-Bromofluorobenzene	102	(79 - 119)	
Toluene-d8	101	(79 - 119)	

# Client Sample ID: B-100-4

### GC/MS Semivolatiles

Lot-Sample #...: D1K120223-015 Work Order #...: ENR3P1AC Matrix.....: SOLID

Date Sampled...: 11/09/01 13:30 Date Received..: 11/10/01 Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Prep Batch #...: 1325202 Analysis Time..: 20:45

Dilution Factor: 1

*** Moisture....:** 22 **Method.....:** SW846 8270C

		•	*		
	•	REPORTING	G		
PARAMETER	RESULT	LIMIT	UNITS	MDL	•
Acenaphthene	ND	330	ug/kg	46	
Acenaphthylene	ND	330	ug/kg	34	
Anthracene	ND	330	ug/kg	78	
Benzo(a)anthracene	ND	330	ug/kg	39	
Benzo(b)fluoranthene	ND	330	ug/kg	100	
Benzo(k)fluoranthene	ND '	330	ug/kg	93	
Benzo(ghi)perylene	ND	330	ug/kg	70	
Benzo(a)pyrene	ND	330	ug/kg	94	
Chrysene	ND	330	ug/kg	53	
Dibenz(a,h)anthracene	ND	330	ug/kg	47	
Fluoranthene	ND	330	ug/kg	84 -	
Fluorene	ND	330	ug/kg	76	
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	48	
Naphthalene	ND	330	ug/kg	70	
Phenanthrene	ND	330	ug/kg	37	
Pyrene	ND	330	ug/kg	40	
<pre>bis(2-Ethylhexyl)    phthalate</pre>	ND	330	ug/kg	. 69	
Dimethyl phthalate	ND	330	ug/kg	85 ·	
•	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
2-Fluorophenol	67	(34 - 97	)		
Phenol-d5	64	(39 - 90	)	•	
Nitrobenzene-d5	67	(33 - 97	)		
2-Fluorobiphenyl	65 ·	(39 - 91	)		
2,4,6-Tribromophenol	57	(29 - 95	)		
Terphenyl-d14	70	(30 - 102	:)		

# Client Sample ID: B-100-15

# GC/MS Semivolatiles

Lot-Sample #:	D1K120223-016	Work Order #:	ENR3R1AC	Matrix:	SOLID

 Date Sampled...:
 11/09/01 13:45
 Date Received...:
 11/10/01

 Prep Date.....:
 11/21/01
 Analysis Date...:
 11/25/01

 Prep Batch #...:
 1325202
 Analysis Time...:
 21:08

Dilution Factor: 1

**% Moisture....:** 7.7 **Method.....:** SW846 8270C

		REPORTING	*		
PARAMETER	RESULT	LIMIT	UNITS	MDL	
Acenaphthene	ND	330	ug/kg	46	
Acenaphthylene	ND	330	ug/kg	34	
Anthracene	ND	330	ug/kg	78	
Benzo(a) anthracene	ND .	330	ug/kg	39	
Benzo(b)fluoranthene	ND	330	ug/kg	100	
Benzo(k) fluoranthene	ND	330	ug/kg	93	•
Benzo(ghi)perylene	ND	330	ug/kg	70	
Benzo(a)pyrene	ND	330	ug/kg	94	
Chrysene	ND	330	ug/kg	53	
Dibenz(a,h)anthracene	ND	330	ug/kg	47	
Fluoranthene	ND	330	ug/kg	84	
Fluorene	ND	330	ug/kg	76	
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	48	
Naphthalene	ND	330	ug/kg	70	
Phenanthrene	ND .	330 .	ug/kg	37	
Pyrene	ND	330	ug/kg	40	
<pre>bis(2-Ethylhexyl)    phthalate</pre>	ND ;	330	ug/kg	69	
Dimethyl phthalate	ND	330	ug/kg	85	
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
2-Fluorophenol	70	(34 - 97 )	•		
Phenol-d5	65	(39 - 90 )			
Nitrobenzene-d5	71	(33 - 97 )			
2-Fluorobiphenyl	67	(39 - 91 )			
2,4,6-Tribromophenol	57	(29 - 95 )			
Terphenyl-d14	72	(30 - 102)		,	

# Client Sample ID: B-64-0.5

# TOTAL Metals

Lot-Sample #. Date Sampled. * Moisture	: 11/08/01	3-001 15:15 Date Received	: 11/10/01	Matrix:	SOLID
PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	: 1318584				
Mercury	0.16	0.033 mg/kg Dilution Factor: 1	<b>SW846 7471A</b> Analysis Time: 01:59	11/14-11/20/01	ENR231AJ
Prep Batch # Silver	ND	1.0 mg/kg	SW846 6010B	11/15-11/18/01	רוגו בכינוגים
Silvei	ND	Dilution Factor: 1	Analysis Time: 18:36	11/13-11/16/01	ENR23 IAD
Arsenic	12.4	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR231AE
		Dilution Factor: 1	Analysis Time: 18:36		
Barium	59.8	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR231AA
	•	Dilution Factor: 1	Analysis Time: 18:36		
Cadmium	3.2	0.50 mg/kg	SW846 6010B	11/15-11/18/01	ENR23
•		Dilution Factor: 1	Analysis Time: 18:36		
Chromium	17.3	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR231AC
		Dilution Factor: 1	Analysis Time: 18:36		
Lead	170	0.80 mg/kg	SW846 6010B	11/15-11/18/01	ENR231AG
		Dilution Factor: 1	Analysis Time: 18:36		·
Selenium	2.8	1.3 mg/kg	SW846 6010B	11/15-11/18/01	ENR231AH
		Dilution Factor: 1	Analysis Time: 18:36		

# Client Sample ID: B-64-3

### TOTAL Metals

**Lot-Sample** #...: D1K120223-002

Date Sampled...: 11/08/01 15:20 Date Received..: 11/10/01

*** Moisture....:** 25

PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Dron Datch	#: 1318584			7	31.5
Mercury	ND	0.033 mg/kg Dilution Factor: 1	SW846 7471A Analysis Time: 02:04	11/14-11/20/01	ENR241AJ
Prep Batch	#: 1319444			•	
Silver	ND	1.0 mg/kg· Dilution Factor: 1	SW846 6010B Analysis Time: 18:52	11/15-11/18/01	ENR241AD
Arsenic	9.4	1.0 mg/kg Dilution Factor: 1	<b>SW846 6010B</b> Analysis Time: 18:52	11/15-11/18/01	ENR241AE
Barium	126	1.0 mg/kg Dilution Factor: 1	<b>SW846 6010B</b> Analysis Time: 18:52	11/15-11/18/01	ENR241AA
Cadmium	ND	0.50 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 18:52	11/15-11/18/01	ENR241AF
Chromium	18.8	1.0 mg/kg Dilution Factor: 1	<b>SW846 6010B</b> Analysis Time: 18:52	11/15-11/18/01	ENR241AC
Lead	10.8	0.80 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time:.18:52	11/15-11/18/01	ENR241AG
Selenium	ND	1.3 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 18:52	11/15-11/18/01	ENR241AH

Matrix....: SOLID

# Client Sample ID: B-64-16

### TOTAL Metals

: SOLID
SOL

Date Sampled...: 11/08/01 15:30 Date Received..: 11/10/01

*** Moisture....:** 18

* Moisture	: 18					•	
		REPORTI	NG	n.		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD		ANALYSIS DATE	ORDER #
* *					·		
Prep Batch #.	: 1318584		•			4	
Mercury	ND	0.033	mg/kg	SW846 74	71A	11/14-11/20/01	ENR251AJ
		Dilution Fac	ctor: 1	Analysis Tim	e: 02:06		
				•			
Prep Batch #.	: 1319444			•			
Silver	ND	1.0	mg/kg	SW846 60	10B	11/15-11/18/01	ENR251AD
		Dilution Fac	tor: 1	Analysis Tim		,,,	
A.							
Arsenic	1.5	1.0	mg/kg	SW846 603	10B ·	11/15-11/18/01	ENR251AE
		Dilution Fac	tor: 1	Analysis Tim	e: 18:57		
Barium	52.5	1.0	mg/kg	SW846 603	LOB	11/15-11/18/01	ENR251AA
		Dilution Fac		Analysis Tim	e: 18:57	,,,	
						,	_
Cadmium	ND	0.50	mg/kg	SW846 601	LOB .	11/15-11/18/01	ENR25
		Dilution Fac	tor: 1	Analysis Time	e: 18:57	ь.	
Chromium	3.9	1.0	mg/kg	SW846 601	LOB	11/15-11/18/01	ENR251AC
		Dilution Fac		Analysis Time		22, 23 22, 10, 01	muzsine
				-			
Lead .	2.7	0.80	mg/kg	SW846 601	.0B	11/15-11/18/01	ENR251AG
		Dilution Fac	tor: 1	Analysis Time	e: 18:57		• ,
Selenium	ND	1.3	mg/kg	SW846 601	.0B	11/15-11/18/01	FNR251AU
		Dilution Fac		Analysis Time		,,,	

# Client Sample ID: B-65-0.5

# TOTAL Metals

Date Sample	#: D1K120223 d: 11/08/01	3-004 15:40 Date Received	: 11/10/01	Matrix:	SOLID
% Moisture.	: 8.0		•		
		REPORTING		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	<b>‡:</b> 1318584				
Mercury	0.18	0.033 mg/kg	SW846 7471A	11/14-11/20/01	ENR261AJ
	•	Dilution Factor: 1	Analysis Time: 02:07	, , , ,	
		•.			
Prep Batch #	<b>!:</b> 1319444				
Silver	ND	1.0 mg/kg	SW846 6010B		DITE
i .		Dilution Factor: 1	Analysis Time: 19:02	11/15-11/18/01	ENR261AD
			744419515 11me 19:02		
Arsenic	11.8	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR261AR
		Dilution Factor: 1	Analysis Time: 19:02	,,,	
Barium	109	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR261AA
		Dilution Factor: 1	Analysis Time: 19:02		
Cadmium	5.0	0.50 mg/kg	GHO 4 C COT OR		
	3.0	0.50 mg/kg Dilution Factor: 1	SW846 6010B	11/15-11/18/01	ENR261AF
		Directon ractor: 1	Analysis Time: 19:02		
Chromium	13.6	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ÉMIDACINA
	•	Dilution Factor: 1	Analysis Time: 19:02	11/13-11/10/01	ENRZ6 LAC
•			,	•	
Lead	308	0.80 mg/kg	SW846 6010B	11/15-11/18/01	ENR261AG
		Dilution Factor: 1	Analysis Time: 19:02	, ,	
·					
Selenium	2.7	1.3 mg/kg	SW846 6010B	11/15-11/18/01	ENR261AH
	•	Dilution Factor: 1	Analysis Time: 19:02		

# Client Sample ID: B-65-3

### TOTAL Metals

Matrix....: SOLID

Lot-Sample #...: D1K120223-005
Date Sampled...: 11/08/01 15:40 Date Received..: 11/10/01

% Moisture....: 27

,					
		REPORTING		PREPARATION-	WORK .
PARAMETER	RESULT	LIMIT UNIT	S METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	- 1318584				. •
Mercury	ND	0.033 mg/kg	SW846 7471A	11/14-11/20/01	ENR281AJ
		Dilution Factor: 1	Analysis Time: 02:05		
Prep Batch #.	: 1319444			e e e e e e e e e e e e e e e e e e e	
Silver	ND	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR281AD
		Dilution Factor: 1	Analysis Time: 19:08		
Arsenic	5.5	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR281AE
		Dilution Factor: 1	Analysis Time: 19:08		
Barium	180	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR281AA
		Dilution Factor: 1	Analysis Time: 19:08		
Cadmium	1.5	0.50 mg/kg	SW846 6010B	11/15-11/18/01	ENR28
		Dilution Factor: 1	Analysis Time: 19:08	•	
Chromium	21.3	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR281AC
		Dilution Factor: 1	Analysis Time: 19:08	÷	
Lead	39.8	0.80 mg/kg	SW846 6010B	11/15-11/18/01	ENR281AG
		Dilution Factor: 1	Analysis Time: 19:08		
Selenium	ND	1.3 mg/kg	SW846 6010B	11/15-11/18/01	ENR281AH
		Dilution Factor: 1	Analysis Time: 19:08	•	

# Client Sample ID: B-65-16

# TOTAL Metals

Lot-Sample #...: D1K120223-006

Date Sampled...: 11/08/01 15:55 Date Received..: 11/10/01

% Moisture....: 16

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOI	) D		PREPARATION- MALYSIS DATE	WORK ORDER #
Dwom Dotah #	1210504							
Prep Batch #. Mercury	ND	0.033 Dilution Facto	mg/kg r: 1		7471A Time: 02		.1/14-11/20/01	ENR291AJ
				1				
Prep Batch #.	: 1319444	•	•					
Silver	ND	1.0	mg/kg	SW846	6010B	1	1,15-11/18/01	ENR291AD
•		Dilution Factor	r: 1		Time: 19		,,,	
Arsenic	1.7	1.0				•		
in belie	1.7	Dilution Factor	mg/kg	SW846			1/15-11/18/01	ENR291AE
		Dilucion Factor	t: T	Analysis	Time: 19	:13		
Barium	34.2	1.0	mg/kg	SW846	6010B	1	1/15-11/18/01	ENR291 A A
	• a	Dilution Factor	:: 1	Analysis	Time: 19:		_,,,	IIII(Z)IIII
Cadmium	ND	0.50			·			
Cadillium	ND		mg/kg	SW846			1/15-11/18/01	ENR291AF
	•	Dilution Factor	:: 1	Analysis '	Time: 19:	:13		
Chromium	4.5	1.0	mg/kg	SW846	6010B	1	1/15-11/18/01	באוס מואר
		Dilution Factor	: 1		Time: 19:		2,13 11,10,01	MIKZJIAC
				-				
Lead	3.3		mg/kg	SW846	6010B	1.	1/15-11/18/01	ENR291AG
	1 •	Dilution Factor	: 1	Analysis 7	Time: 19:	13		
Selenium	ND	1.3	mg/kg	CMOAC			175 75 15 15	
	<del>-</del>	Dilution Factor		SW846 (	6010B Time: 19:		L/15-11/18/01	ENR291AH
			. 1	Aualysis 1	iime: 19:	13		

# Client Sample ID: B-66-0.5

# TOTAL Metals

· <del>-</del>	: D1K120223 : 11/08/01		Received.	:: 11/10/01	Matrix:	SOLID
		REPORTIN	īG		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #.	: 1318584					
Mercury	0.12	0.033	mg/kg	SW846 7471A	11/14-11/20/01	ENR3ALAJ
		Dilution Fac	tor: 1	Analysis Time: 02:12		
Prep Batch #.	: 1319444		•	•		
Silver	ND	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENR3A1AD
		Dilution Fac	tor: 1	Analysis Time: 19:18		
Arsenic	92.3	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENR3ALAE
		Dilution Fac	tor: 1	Analysis Time: 19:18		
Barium	143	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENR3A1AA
	•	Dilution Fac		Analysis Time: 19:18		
				•		
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/15-11/18/01	ENR3A
		Dilution Fact	tor: 1	Analysis Time: 19:18		
Chromium	31.0	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENR3ALAC
	-	Dilution Fact	cor: 1	Analysis Time: 19:18	•	
Lead	156	0.80	mg/kg	SW846 6010B	11/15-11/18/01	ENR3ALAG
	•	Dilution Fact	or: 1	Analysis Time: 19:18		
Selenium	5.6	1.3	mg/kg	SW846 6010B	11/15-11/18/01	בי מר מכ מות
					,	עערענייי

Analysis Time..: 19:18

Dilution Factor: 1

# Client Sample ID: B-66-3

# TOTAL Metals

Lot-Sample #...: D1K120223-008

Date Sampled...: 11/08/01 16:30 Date Received..: 11/10/01

% Moisture....: 17

•							
	Á	REPORTING	}		PREPARATION-	WORK	
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #	
Prep Batch #.	: 1318584						
Mercury	ND	0.033 Dilution Facto	mg/kg or: 1	SW846 7471A Analysis Time: 02:14		ENR3C1AJ	
Prep Batch #.	- 1319444						
Silver	ND	1.0 Dilution Facto	mg/kg or: 1	SW846 6010B Analysis Time: 19:23	11/15-11/18/01	ENR3C1AD	
Arsenic	5.7	1.0 Dilution Facto	mg/kg	<b>SW846 6010B</b> Analysis Time: 19:23	11/15-11/18/01	ENR3C1AE	
Barium	155	1.0 Dilution Facto	mg/kg	<b>SW846 6010B</b> Analysis Time: 19:23	11/15-11/18/01	ENR3CLAA	
Cadmium	1.5	0.50 Dilution Facto	mg/kg	<b>SW846 6010B</b> Analysis Time: 19:23	11/15-11/18/01	ENR3ČLAF	
Chromium	15.4	1.0 Dilution Facto	mg/kg r: 1	<b>SW846 6010B</b> Analysis Time: 19:23	11/15-11/18/01	ENR3ClAC	
Lead	69.3	0.80 Dilution Facto	mg/kg	SW846 6010B Analysis Time: 19:23	11/15-11/18/01	ENR3C1AG	
Selenium	ND	1.3 Dilution Facto	mg/kg r: 1	SW846 6010B Analysis Time: 19:23	11/15-11/18/01	ENR3ClAH	

Matrix..... SOLID

# Client Sample ID: B-66-16

### TOTAL Metals

•		
Lot-Sample #: D1K120223-009	Matrix	- SOLID

Date Sampled...: 11/08/01 16:40 Date Received..: 11/10/01 % Moisture....: 7.2

		REPORTING	}		٠	PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD		ANALYSIS DATE	ORDER #
Prep Batch #	: 1318584						
Mercury	ND	0.033	mg/kg	SW846 747	1A	11/14-11/20/01	ENR3E1AJ
		Dilution Facto	or: 1	Analysis Time	: 02:19		
Prep Batch #	: 1319444						
Silver	ND	1.0	mg/kg	SW846 601	ЭB	11/15-11/18/01	ENR3E1AD
	•	Dilution Facto	or: 1	Analysis Time	: 19:29		
Arsenic	1.5		mg/kg	SW846 601	)B	11/15-11/18/01	ENR3E1AE
	•	Dilution Facto	or: 1	Analysis Time	: 19:29		
Barium	37.9	1.0	ma/ka	SW846 6010	מו	11/15 11/10/01	mm2=122
	37.3	Dilution Facto		Analysis Time		11/15-11/18/01	ENRSELAA
		211111111111111111		Anarysis fine	: 15:25		
Cadmium	ND	0.50	mg/kg ·	SW846 6010	B	11/15-11/18/01	ENR3E
		Dilution Facto	r: 1	Analysis Time.	.: 19:29	, , , , , , , , ,	
						ŧ	
Chromium	4.2	1.0	mg/kg	SW846 6010	B	11/15-11/18/01	ENR3E1AC
		Dilution Facto	r: 1	Analysis Time.	.: 19:29		
Lead	3.3	0.80	mg/kg	SW846 6010	ıB	11/15-11/18/01	באום זבו אכ
		Dilution Facto		Analysis Time.		11/15 11/10/01	MIKSEIAG
						•	
Selenium	ND	1.3	mg/kg	SW846 6010	В	11/15-11/18/01	ENR3E1AH
	•	Dilution Facto	r: 1	Analysis Time.			

# Client Sample ID: B-67-0.5

# TOTAL Metals

Lot-Sample # Date Sampled % Moisture	.: 11/08/01	-010 16:50 Date Received.	: 11/10/01	Matrix: SOLID
PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- WORK ANALYSIS DATE ORDER #
Prep Batch # Mercury	.: 1318584 0.053	0.033 mg/kg Dilution Factor: 1	<b>SW846 7471A</b> Analysis Time: 02:21	11/14-11/20/01 ENR3F1AJ
Prep Batch # Silver	.: 1319444 ND	1.0 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 19:34	11/15-11/18/01 ENR3F1AD
Arsenic	15.0	1.0 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 19:34	11/15-11/18/01 ENR3F1AE
Barium	93.8	1.0 mg/kg Dilution Factor: 1	<b>SW846 6010B</b> Analysis Time: 19:34	11/15-11/18/01 ENR3FlAA
Cadmium	4.0	0.50 mg/kg Dilution Factor: 1	<b>SW846 6010B</b> Analysis Time: 19:34	11/15-11/18/01 ENR3F1AF
Chromium	17.4	1.0 mg/kg Dilution Factor: 1	<b>SW846 6010B</b> Analysis Time: 19:34	11/15-11/18/01 ENR3F1AC
Lead	49.5	0.80 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 19:34	11/15-11/18/01 ENR3F1AG
Selenium	4.9	1.3 mg/kg	SW846 6010B	11/15-11/18/01 ENR3FlAH

Analysis Time..: 19:34

Dilution Factor: 1

# Client Sample, ID: B-67-3

### TOTAL Metals

Lot-Sample #...: D1K120223-011 Matrix....: SOLID

Date Sampled...: 11/08/01 16:50 Date Received..: 11/10/01 * Moisture....: 17

* Moisture	: 17		•			
		REPORTI	NG	•	PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Desar Datab II	7270504					
Prep Batch #		0 022	/1 >	G170.4.6. E.4.E.4.3		
Mercury	ND	0.033	mg/kg	SW846 7471A	11/14-11/20/01	ENR3G1AJ
		Dilution Fa	ctor: 1	Analysis Time: 02	: 22	
Prep Batch #	: 1319444				*	<b>.</b>
Silver	ND	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENR3G1AD
		Dilution Fa	ctor: 1	Analysis Time: 19	: 39	
Arsenic	11.2	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENR3G1AE
	•	Dilution Fa	ctor: 1	Analysis Time: 19	:39	
Barium	115	7.0	/1			
Barium	112	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENR3G1AA
		Dilution Fa	ctor: 1	Analysis Time: 19:	: 39	
Cadmium	3.8	0.50	mg/kg	SW846 6010B	11/15-11/18/01	ENR36
		Dilution Fac	ctor: 1	Analysis Time: 19:	39	
Chromium	15.0	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENR3G1AC
		Dilution Fac	ctor: 1	Analysis Time: 19:	39	•
Lead	299	0.80	mg/kg	SW846 6010B	11/15-11/18/01	ENR3G1AG
		Dilution Fac	ctor: 1	Analysis Time: 19:	39 .	
Selenium	1.9	1.3	mg/kg	SW846 6010B	11/15-11/18/01	ENR3G1AH
		Dilution Fac	ctor: 1	Analysis Time: 19:	•	

# Client Sample ID: B-67-16

### TOTAL Metals

Lot-Sample #...: D1K120223-012 Matrix....: SOLID

Date Sampled...: 11/08/01 16:55 Date Received..: 11/10/01

% Moisture....: 17

PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION-	WORK
			NETHOD	ANALYSIS DATE	ORDER #
Prep Batch #	1318584				
Mercury	ND	0.033 mg/kg	SW846 7471A	11/14-11/20/01	ENR3H1AJ
		Dilution Factor: 1	Analysis Time: 02:24		
Prep Batch #	: 1319444	•			
Silver	ND	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR3H1AD
		Dilution Factor: 1	Analysis Time: 19:55		
Arsenic	2.1	1.0 mg/kg	CWC4C COLOR	77/75 75/75/75	
		Dilution Factor: 1	<b>SW846 6010</b> B Analysis Time: 19:55	11/15-11/18/01	ENR3H1AE
		.*			
Barium	55.6	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR3HLAA
	•	Dilution Factor: 1	Analysis Time: 19:55		•
Cadmium	ND	0.50 mg/kg	SW846 6010B	11/15-11/18/01	יי א בנו כ מואי
		Dilution Factor: 1	Analysis Time: 19:55	11/15-11/18/01	TALESMA
Chromium	44.0				
CITTORITUM	11.9	1.0 mg/kg	SW846 6010B	11/15-11/18/01	ENR3H1AC
	•	Dilution Factor: 1	Analysis Time. : 19:55		
Lead	6.1	0.80 mg/kg	SW846 6010B	11/15-11/18/01	ENR3H1AG
		Dilution Factor: 1	Analysis Time: 19:55	,,,	
Selenium	ND	1.3 mg/kg	CMC'AC COLOR	<b>77/77</b> 77/77	
	1.2	Dilution Factor: 1	SW846 6010B Analysis Time: 19:55	11/15-11/18/01	ENR3H1AH
			Auty515 11ME: 17:55		

# LABORATORY CONTROL SAMPLE EVALUATION REPORT

### TOTAL Metals

Lot-Sample #...: D1K120223 Matrix.....: SOLID

* 5						*	
	PERCENT	RECOVERY	RPI			PREPARATION~	PREP-
PARAMETER	RECOVERY	LIMITS	RPD LI	MITS METHO	D	ANALYSIS DATE	BATCH #
Arsenic	, 97	(87 - 107)		SW846	6010B	11/15-11/18/01	
	99	(87 - 107)	2.1 (0	)-20) SW846	6010B	11/15-11/18/01	1319444
		Dilution	n Factor:	: 1			••
Barium	95	(86 - 114)		SW846	6010B	11/15-11/18/01	1319444
	97	(86 - 114)	1.6 (0	)-20) SW846	6010B	11/15-11/18/01	1319444
		Dilution	n Factor:	: 1	e .		
Cadmium	95	(89 - 109)				11/15-11/18/01	1319444
	97	(89 - 109)	2.1 (0	-20) SW846	6010B	11/15-11/18/01	1319444
		Dilution	n Factor:	1			
Chromium	98			SW846		11/15-11/18/01	1319444
	100	(88 - 110)	1.9 (0	-20) SW846	6010B	11/15-11/18/01	1319444
		Dilution	Factor:	1			
_							
Lead	97	(88 - 108)			6010B	11/15-11/18/01	1319444
	98	(88 - 108)			6010B	11/15-11/18/01	1319444
		Dilution	Factor:	1			•
0-31	•	/					
Selenium	94	(86 - 107)			6010B	11/15-11/18/01	
	97	(86 - 107) 2			6010B	11/15-11/18/01	1319444
•	-	Dilution	Factor:	1			
Silver	101	(00 100)		<b>5710</b> 4 6			
PITACT	101 102	(88 - 108)		SW846		11/15-11/18/01	
	102	(88 - 108) 1			6010B	11/15-11/18/01	1319444
		Dilution	ractor:	1			

NOTE(S):

# LABORATORY CONTROL SAMPLE DATA REPORT

# TOTAL Metals

Lot-Sample #...: D1K120223

Matrix..... SOLID

	SPIKE	MEASURED		PERCNT				PREPARATION-	PREP
PARAMETER	AMOUNT	AMOUNT	UNITS	RECVRY	RPD	METHO:	D	ANALYSIS DATE	BATCH #
Arsenic	200	194	mg/kg	97	•	SW846	6010B	11/15-11/18/01	
	200	198	mg/kg	99	2.1	SW846	6010B	11/15-11/18/01	
		D	ilution Fac	tor: 1		r.			
Barium	200	190	mg/kg	95		GEVO 4.6	60105		
Darrum	200	193					6010B	11/15-11/18/01	
,	200		mg/kg	97	1.6	SW846	6010B	11/15-11/18/01	1319444
		D:	ilution Fac	tor: 1					
Cadmium	5.00	4.73	mg/kg	, 95		SW846	6010B	11/15-11/18/01	1319444
	5.00	4.83	mg/kg	97 ÷	2.1	SW846	<del>-</del>	11/15-11/18/01	
		D:	ilution Fac		,			12/13 11/10/01	
Chromium	20.0	19.7	mg/kg	98		SW846	6010B	11/15-11/18/01	1319444
•	20.0	20.1	mg/kg	100	1.9	SW846	6010B	11/15-11/18/01	
		Di	llution Fact	tor: 1					
				,					
Lead	50.0		mg/kg	97		SW846	6010B	11/15-11/18/01	1319444
	50.0	49.2	mg/kg		1.6	SW846	6010B	11/15-11/18/01	1319444
•		Di	lution Fact	cor: 1			•	,	
<b>.</b>								•	
Selenium	200	188	mg/kg	94		SW846	6010B	11/15-11/18/01	1319444
	200		mg/kg		2.6	SW846	6010B	11/15-11/18/01	1319444
		Di	lution Fact	or: 1					
Silver	5.00	F 04	/1						
PITAGE			mg/kg	101		SW846		11/15-11/18/01	
	5.00		mg/kg		1.5	SW846	6010B	11/15-11/18/01	1319444
		Di	lution Fact	or: 1					

NOTE(S):

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### TOTAL Metals

Client Lot #...: D1K120223

Matrix..... SOLID

PERCENT

91

RECOVERY

PREPARATION-

PARAMETER

RECOVERY

LIMITS

METHOD

ANALYSIS DATE WORK ORDER #

LCS Lot-Sample#: D1K140000-584 Prep Batch #...: 1318584

(82 - 113) SW846 7471A

11/14-11/20/01 EN4JA1AC

Dilution Factor: 1

Analysis Time..: 01:54

NOTE(S):

Mercury

#### LABORATORY CONTROL SAMPLE DATA REPORT

### TOTAL Metals

Client Lot #...: D1K120223

Matrix..... SOLID

SPIKE

0.417

MEASURED

0.380

PERCNT

WORK

PARAMETER

AMOUNT AMOUNT

UNITS

RECVRY METHOD

PREPARATION-ANALYSIS DATE ORDER #

LCS Lot-Sample#: D1K140000-584 Prep Batch #...: 1318584

mg/kg

91

SW846 7471A -

11/14-11/20/01 EN4JA1AC

Dilution Factor: 1

Analysis Time. : 01:54

NOTE(S):

Mercury

# METHOD BLANK REPORT

# TOTAL Metals

Client Lot #.	: D1K12022	3	Mat	crix SOLID
PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- WORK ANALYSIS DATE ORDER #
MB Lot-Sample Arsenic	#: D1K15000 ND	0-444 Prep Batch #: 1.0 mg/kg Dilution Factor: 1	SW846 6010B	11/15-11/18/01 EN2231AC
Barium	ND	Analysis Time: 17:49  1.0 mg/kg  Dilution Factor: 1  Analysis Time: 17:49	SW846 6010B	11/15-11/18/01 EN2231DH
Cadmium	ND	0.50 mg/kg Dilution Factor: 1 Analysis Time: 17:49	SW846 6010B	11/15-11/18/01 EN2231AF
Chromium	ND	1.0 mg/kg Dilution Factor: 1 Analysis Time: 17:49	SW846 6010B	11/15-11/18/01 EN2231DJ
Lead	ND	0.80 mg/kg Dilution Factor: 1 Analysis Time: 17:49	SW846 6010B	11/15-11/18/01 EN2231AK
Selenium	ND	1.3 mg/kg Dilution Factor: 1 Analysis Time: 17:49	SW846 6010B	11/15-11/18/01 EN2231AN
Silver	ND	1.0 mg/kg Dilution Factor: 1 Analysis Time: 17:49	SW846 6010B	11/15-11/18/01 EN2231AP
MR Lot-Camolo	# D1V14000	)-584 <b>Prep Batch #:</b>	1210504	
Mercury	ND .	0.033 mg/kg Dilution Factor: 1 Analysis Time: 01:53	1318584 SW846 7471A	11/14-11/20/01 EN4JA1AA

# MATRIX SPIKE SAMPLE EVALUATION REPORT

### TOTAL Metals

Client Lot Date Sample		20223 5/01 10:40 <b>Date Received</b>	1: 11/08/01	Matrix SOLID
PARAMETER	PERCENT RECOVERY	RECOVERY RPD LIMITS RPD LIMITS	METHOD	PREPARATION- WORK ANALYSIS DATE ORDER #
MC Tot Com-	a - 4 pavác	20222 202		
Arsenic	93 16 #: DIKUS	90222-001 Prep Batch #. (87 - 107)		11/15 11/10/01 777/77/7
ALSCIIC	91	(87 - 107) (87 - 107) 2.1 (0-20)	SW846 6010B SW846 6010B	11/15-11/18/01 ENM7M1CG 11/15-11/18/01 ENM7M1CH
	J <b>1</b>	Dilution Factor: 1	PM040 GOTOP	11/15-11/18/01 ENM/MICH
		Analysis Time: 18:1	5	
			•	
Barium	90	(86 - 114)	SW846 6010B	11/15-11/18/01 ENM7M1DW
	90	(86 - 114) 0.21 (0-20)	SW846 6010B	11/15-11/18/01 ENM7M1DX
*		Dilution Factor: 1		
		Analysis Time: 18:1	5	
		,	¥	
Cadmium	90	(89 - 109)	SW846 6010B	11/15-11/18/01 ENM7M1CN
	89	(89 - 109) 0.91 (0-20)	SW846 6010B	11/15-11/18/01 ENM7M1CP
		Dilution Factor: 1	· -•	
		Analysis Time: 18:1	5	
Chromium	90 •	(88 - 110)	SW846 6010B	11/15-11/18/01 ENM7M1D1
	92	(88 - 110) 1.6 (0-20)	SW846 6010B	11/15-11/18/01 ENM7M1D1 11/15-11/18/01 ENM7M1D2
a.		Dilution Factor: 1	5010 00105	11,13 11,10,01 11,111112
• • •		Analysis Time: 18:15	· · · · · · · · · · · · · · · · · · ·	
	•		•	
Lead	92	(88 - 108)	SW846 6010B	11/15-11/18/01 ENM7M1CX
	91	(88 - 108) 0.35 (0-20)	SW846 6010B	11/15-11/18/01 ENM7M1C0
	,	Dilution Factor: 1		
•		Analysis Time: 18:15	5	•
Selenium	90	(86 107)	C110.4.6	
Setentum	90 89	(86 - 107) (86 - 107) 1.4 (0-20)	SW846 6010B	11/15-11/18/01 ENM7M1C5
	ری	Dilution Factor: 1	SW846 6010B	11/15-11/18/01 ENM7M1C6
•		Analysis Time: 18:15		
	· •	· amayous lime 10:13		•
Silver	92	(88 - 108)	SW846 6010B	11/15-11/18/01 ENM7M1C7
	89	(88 - 108) 3.7 (0-20)	SW846 6010B	11/15-11/18/01 ENM7M1C8
		Dilution Factor: 1		
		Analysis Time: 18:15		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

# MATRIX SPIKE SAMPLE DATA REPORT

### TOTAL Metals

Client Lo				•				Mata	rix soi	LID
Date Samp	oled:	11/05	/01 10	0:40 Date Rece	ived:	11/08/	01			
	SAMPLE	CDTVE	MEACI	men.	DEDGM	m		•	·	
PARAMETER			AMOUN		PERCN		Mana		PREPARATION-	WORK
TINGHILLIN	PATOONI	Phil	AMOUN	NT UNITS	RECVR	Y RPD	METHO	ט	ANALYSIS DATE	ORDER #
MS Lot-Sa	mple #:	D1K09	0222-0	001 Prep Batcl	h #	131944	4		•	
Arsenic	. <del>-</del>				_ "		•			
	1.4	218	204	mg/kg	93		SW846	6010B	11/15-11/18/01	ENM7M1CC
	1.4	218	200	mg/kg	91	2.1		6010B	11/15-11/18/01	
				Dilution Factor:	1			•	==, == ==, ==, ==,	
				Analysis Time:	18:15					
	*									•
Barium										
	40.3	200	221	mg/kg	90		SW846	6010B	11/15-11/18/01	ENM7M1DW
	40.3	200	221	mg/kg ·	90	0.21	SW846	6010B	11/15-11/18/01	. ENM7M1DX
				Dilution Factor:						
				Analysis Time:	18:15					
<b>a</b>		•	•			•				
Cadmium	NTO .	5 45	4 00							
•	ND	5.45	4.92	mg/kg	90			6010B	11/15-11/18/01	
	ND .	5.45	4.88	mg/kg	89	0.91	SW846	6010B	11/15-11/18/01	ENM7M1CP
		i i		Dilution Factor:						
				Analysis Time:	18:15					
Chromium					•				•	
	4.8	20.0	22.9	mg/kg	90		CMOAC	C010D	17/75 77/70/00	
		20.0	23.3	mg/kg	92	1.6	SW846 SW846		11/15-11/18/01	
				Dilution Factor:		1.0	24040	POTOB	11/15-11/18/01	ENM7M1D2
				Analysi's Time:					•	
					10.10					
Lead										
	5.9	54.5	55.9	mg/kg	92		SW846	6010B	11/15-11/18/01	EMM7M1CV
	5.9	54.5	55.7	mg/kg	91	0.35	SW846		11/15-11/18/01	
				Dilution Factor: :				00102	11/13 11/10/01	ENMINITED
			. ·	Analysis Time:	18:15					
Selenium										
			197	mg/kg	90		SW846	6010B	11/15-11/18/01	ENM7M1C5
	ND .	218	194	mg/kg	89	1.4	SW846	6010B	11/15-11/18/01	
				Dilution Factor: 1			*			
			2	Analysis Time: 1	L8:15					
047				•	•					
Silver						ı	•			
			5.04	mg/kg	92		SW846		11/15-11/18/01	
	ND !	5.45	4.86	mg/kg	89	3.7	SW846	6010B	11/15-11/18/01	ENM7M1C8
				Dilution Factor: 1						
			F	Analysis Time: 1	.8:15					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### TOTAL Metals

Client Lot #...: D1K120223 Matrix.....: SOLID

Date Sampled...: 11/08/01 15:15 Date Received..: 11/10/01

PERCENT RECOVERY RPD PREPARATION- WORK

PARAMETER RECOVERY LIMITS RPD LIMITS METHOD ANALYSIS DATE ORDER #

MS Lot-Sample #: D1K120223-001 Prep Batch #...: 1318584

Mercury 76 N (82 - 113) SW846 7471A 11/14-11/20/01 ENR231AM

85 (82 - 113) 7.9 (0-20) SW846 7471A 11/14-11/20/01 ENR231AN

Dilution Factor: 1
Analysis Time..: 02:01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

# MATRIX SPIKE SAMPLE DATA REPORT

#### TOTAL Metals

Client Lot #...: D1K120223 Matrix....: SOLID

Date Sampled...: 11/08/01 15:15 Date Received..: 11/10/01

SAMPLE SPIKE MEASURED PERCNT PREPARATION-WORK

PARAMETER AMOUNT AMT AMOUNT UNITS RECVRY RPD METHOD ANALYSIS DATE ORDER #

MS Lot-Sample #: D1K120223-001 Prep Batch #...: 1318584

Mercury

0.16 0.417 0.476 N mg/kg 76 SW846 7471A 11/14-11/20/01 ENR231AM

0.16 0.417 0.515 mg/kg 85 7.9 SW846 7471A 11/14-11/20/01 ENR231AN

Dilution Factor: 1

Analysis Time..: 02:01

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

# QC DATA ASSOCIATION SUMMARY

### D1K120223

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
001	SOLID	SW846 7471A		1318584	1320075
	SOLID	SW846 6010B		1319444	1319214
•	SOLID	MCAWW 160.3 MOD		1331247	1331107
002	SOLID	SW846 7471A		1318584	1320075
	SOLID	SW846 6010B		1319444	1319214
	SOLID	MCAWW 160.3 MOD		1331247	1331107
				233221,	1331107
003 -	SOLID	SW846 7471A		1318584	1320075
	SOLID	SW846 6010B		1319444	1319214
	SOLID	MCAWW 160.3 MOD		1331247	1331107
004	SOLID	SW846 7471A		1318584	1220075
302	SOLID	SW846 6010B			1320075
	SOLID	MCAWW 160.3 MOD		1319444	1319214
	BOHID	FICAWW 100.3 MOD		1331247	1331107
005	SOLID	SW846 7471A		1318584	1320075
	SOLID	SW846 6010B		1319444	1319214
	SOLID	MCAWW 160.3 MOD	*	1331247	1331107
			•		
006	SOLID	SW846 7471A		1318584	1320075
	SOLID	SW846 6010B		1319444	1319214
	SOLID	MCAWW 160.3 MOD		1331247	1331107
007	SOLID	SW846 7471A		1318584	1320075
	SOLID	SW846 6010B		1319444	1319214
	SOLID	MCAWW 160.3 MOD		1331247	1331107
008	SOLID	SW846 7471A		1318584	1320075
	SOLID	SW846 6010B		1319444	1319214
	SOLID	MCAWW 160.3 MOD		1331247	1331107
009	SOLID	SW846 7471A		1318584	1320075
	SOLID	SW846 6010B	•	1319444	1319214
	SOLID	MCAWW 160.3 MOD		1331247	1331107
				2332247	1331107
010	SOLID	SW846 7471A		1318584	1320075
	SOLID	SW846 6010B		1319444	1319214
	SOLID	MCAWW 160.3 MOD		1331247	1331107
*					,
. 011	SOLID	SW846 7471A		1318584	1320075
	SOLID	SW846 6010B		1319444	1319214
•	SOLID	MCAWW 160.3 MOD		1331247	1331107

# QC DATA ASSOCIATION SUMMARY

# D1K120223

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
012	SOLID	CW046 7477		*	
012	•	SW846 7471A		1318584	1320075
	SOLID	SW846 6010B		1319444	1319214
	SOLID	MCAWW 160.3 MOD		1331247	1331107
013	WATER	SW846 8260B		1324405	1324198
014	WATER	SW846 8260B "		1324405	1324198
015	SOLID	SW846 8260B		1325482	1325238
*	SOLID	SW846 8270C		1325202	1325071 .
•	SOLID	MCAWW 160.3 MOD		1331247	1331107
016	SOLID	SW846 8260B	•	1205.40	
010				1325469	1325235
	SOLID	SW846 8270C		1325202	1325071
	SOLID	MCAWW 160.3 MOD		1331247	1331107
017	WATER	SW846 8260B		1324405	1324198

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: EPA3A1AC-LCS Matrix.....: WATER

LCS Lot-Sample#: D1K200000-405

EPA3A1AD-LCSD

Prep Date....: 11/19/01

Analysis Date..: 11/19/01

Prep Batch #...: 1324405

Analysis Time..: 10:16

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	*
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	102	(79 - 119)		SW846 8260B
	· 98	(79 - 119)	4.0 (0-20)	SW846 8260B
Benzene	108	(79 <i>-</i> 119)		SW846 8260B
	106	(79 - 119)	1.3 (0-20)	SW846 8260B
Chlorobenzene	89	(76 - 116)		SW846 8260B
	92	(76 - 116)	2.5 (0-20)	SW846 8260B
Toluene	101	(75 - 122)	· ·	SW846 8260B
	103	(75 - 122)	1.8 (0-20)	SW846 8260B
Trichloroethene	109	(81 - 121)		SW846 8260B
	110	(81 - 121)	0.89 (0-20)	SW846 8260B
• .	*		•	
		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane		103	(80 - 120)	
	•	103	(80 - 120)	•
1,2-Dichloroethane-d4		98	(72 - 127)	
		99	(72 - 127)	•
4-Bromofluorobenzene		100	(79 - 119)	
		99	(79 - 119)	
Toluene-d8		98	(79 - 119)	
		100	(79 - 119)	
			225/	

### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

# LABORATORY CONTROL SAMPLE DATA REPORT

# GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: EPA3A1AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K200000-405 EPA3A1AD-LCSD

 Prep Date....: 11/19/01
 Analysis Date..: 11/19/01

 Prep Batch #...: 1324405
 Analysis Time..: 10:16

Dilution Factor: 1

	SPIKE	MEASUREI		PERCENT	•		
PARAMETER	THUOMA	TNUOMA	UNITS	RECOVERY	RPD	METHO	D
1,1-Dichloroethene	10.0	10.2	ug/L	102		SW846	8260B
	10.0	9.79	ug/L	98	4.0	SW846	8260B
Benzene	10.0	10.8	ug/L	108	•	SW846	8260B
	10.0	10.6	ug/L	106	1.3	SW846	8260B
Chlorobenzene	10.0	8.95	ug/L	89		SW846	8260B
	10.0	9.17	ug/L	92	2.5	SW846	8260B
Toluene	10.0	10.1	ug/L	101		SW846	8260B
	10.0	10.3	ug/L	103	1.8	SW846	8260B
Trichloroethene	10.0	10.9	ug/L	109			8260B
	10.0	11.0	ug/L	. 110	0.89		8260B
			_	* *			
•	•		PERCENT	RECOVERY			
SURROGATE			RECOVERY	LIMITS			
Dibromofluoromethane			103	(80 - 120	)		
			103	(80 - 120			
1,2-Dichloroethane-d4			98	(72 - 127)			• •
•			99	(72 - 127)		,	
4-Bromofluorobenzene			100	(79 - 119)			
			99	(79 - 119)			
Toluene-d8			98	(79 - 119)			
	•	•	100	(79 - 119)			

### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

# LABORATORY CONTROL SAMPLE EVALUATION REPORT

### GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: EPFAE1AC-LCS Matrix....: SOLID

LCS Lot-Sample#: D1K210000-482

EPFAE1AD-LCSD

Prep Date....: 11/20/01

Analysis Date..: 11/20/01

Prep Batch #...: 1325482

Analysis Time..: 10:30

Dilution Factor: 1

•	PERCENT	RECOVERY	RI	PD		
PARAMETER	RECOVERY	LIMITS	RPD LI	IMITS	METHOL	)
1,1-Dichloroethene	94	(78 - 118)			SW846	8260B
	96	(78 - 118)	2.3 (0	)-25)	SW846	8260B
Benzene	103	(79 - 121)			SW846	8260B
	105	(79 - 121)	2.3 (0	)-25)	SW846	8260B
Chlorobenzene	82	(76 - 116)			SW846	8260B
	84	. (76 - 116)	2.8 (0	)-25)	SW846	8260B
Toluene	83	(76 - 116)			SW846	8260B
	86	(76 - 116)	3.5 (0	)-25)	SW846	8260B
Trichloroethene	101	(83 - 123)			SW846	8260B
•	104	(83 - 123)	3.1 (0	-25)	SW846	8260B
		el			,	
		PERCENT	RECOVERY	-		
SURROGATE		RECOVERY	LIMITS			
Dibromofluoromethane		104	(80 - 12	0)		4
		107	(80 - 12	0)		•
1,2-Dichloroethane-d4	••	102	(79 - 12	5)		•
		104	(79 - 12	5)		
4-Bromofluorobenzene		93	(71 - 13	2)		
		98	(71 - 13	2)		
Toluene-d8		87	(77 - 11	7)		
		91	(77 - 11	7)		

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

### LABORATORY CONTROL SAMPLE DATA REPORT

#### GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: EPFAE1AC-LCS Matrix..... SOLID

LCS Lot-Sample#: D1K210000-482

EPFAE1AD-LCSD ·

(77 - 117)

Prep Date....: 11/20/01

Analysis Date..: 11/20/01

Analysis Time..: 10:30

Prep Batch #...: 1325482 Dilution Factor: 1

SPIKE **MEASURED** PERCENT PARAMETER AMOUNT AMOUNT UNITS RECOVERY METHOD RPD 1,1-Dichloroethene 50.0 47.0 ug/kg 94 SW846 8260B 50.0 48.1 ug/kg 96 2.3 SW846 8260B Benzene 50.0 51.5 ug/kg 103 SW846 8260B 50.0 52.6 ug/kg 105 2.3 SW846 8260B Chlorobenzene 50.0 40.9 ug/kg 82 SW846 8260B ' 50.0 42.1 ug/kg SW846 8260B 84 2.8 Toluene 50.0 41.4 ug/kg 83 SW846 8260B 50.0 42.9 ug/kg 86 SW846 8260B 3.5 Trichloroethene 50.0 50.4 ug/kg 101 SW846 8260B 50.0 52.0 ug/kg 104 3.1 SW846 8260B PERCENT RECOVERY SURROGATE RECOVERY LIMITS Dibromofluoromethane 104 (80 - 120)107 (80 - 120)1,2-Dichloroethane-d4 102 (79 - 125)104 (79 - 125)4-Bromofluorobenzene 93 (71 - 132)98 (71 - 132)Toluene-d8 87 (77 - 117)

91

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

# LABORATORY CONTROL SAMPLE EVALUATION REPORT

### GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: EPE4M1AC-LCS Matrix.....: SOLII

LCS Lot-Sample#: D1K210000-469 EPE4M1AD-LCSD

Prep Date....: 11/19/01 Analysis Date..: 11/19/01
Prep Batch #...: 1325469 Analysis Time..: 11:17

Dilution Factor: 1

•	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	97	(78 - 118)		SW846 8260B
	99	(78 - 118)	2.3 (0-25)	SW846 8260B
Benzene	106	(79 - 121)	3	SW846 8260B
•	110	(79 - 121)	3.3 (0-25)	SW846 8260B
Chlorobenzene	89	(76 - 116)		SW846 8260B
	90	(76 - 116)	1.8 (0-25)	SW846 8260B
Toluene	89	(76 - 116)		SW846 8260B
	92	(76 - 116)	2.9 (0-25)	SW846 8260B
Trichloroethene	101	(83 - 123)		SW846 8260B
•	108	(83 - 123)	6.9 (0-25)	SW846 8260B
		PERCENT	RECOVERY	***************************************
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane	*	109	(80 - 120)	
	•	112	(80 - 120)	
1 2 Diahlawaathana da		100	/=·	•

SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	109	(80 - 120)
	. 112	(80 - 120)
1,2-Dichloroethane-d4	103	(79 - 125)
	104	(79 - 125)
4-Bromofluorobenzene	102	(71 - 132)
	. 101	(71 - 132)
Toluene-d8	94	(77 - 117)
	95	(77 - 117)

### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

# LABORATORY CONTROL SAMPLE DATA REPORT

### GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: EPE4M1AC-LCS Matrix...... SOLID

LCS Lot-Sample#: D1K210000-469

EPE4M1AD-LCSD

Prep Date....: 11/19/01

Analysis Date..: 11/19/01

Prep Batch #...: 1325469

Analysis Time..: 11:17

Dilution Factor: 1

	SPIKE	MEASUREI	)	PERCENT		
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	50.0	48.5	ug/kg	97		SW846 8260B
	50.0	49.7	ug/kg	99	2.3	SW846 8260B
Benzene	50.0	53.1	ug/kg	106		SW846 8260B
	50.0	54.9	ug/kg	.110	3.3	SW846 8260B
Chlorobenzene	50.0	44.3	ug/kg	89		SW846 8260B
	50.0	45.1	ug/kg	90	1.8	SW846 8260B
Toluene	50.0	44.5	ug/kg	89		SW846 8260B
	50.0	45.9	ug/kg	92	2.9	SW846 8260B
Trichloroethene	50.0	50.3	ug/kg	101		SW846 8260B
	50.0	53.9	ug/kg	108	6.9	SW846 8260B
		* *		•		
			PERCENT	RECOVERY		
SURROGATE	_		RECOVERY	LIMITS		
Dibromofluoromethane			109	(80 - 120)	)	
			112	(80 - 120)	)	
1,2-Dichloroethane-d4		•	103	(79 - 125)		
			104	(79 - 125)	)	
4-Bromofluorobenzene			102	(71 - 132)	,	
			101	(71 - 132)	)	
Toluene-d8			94	·(77 - 117)	) · · · · ·	
		<b>4</b> .	95	(77 - 117)		
•	•			1.1		

### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### METHOD BLANK REPORT

### GC/MS Volatiles

Client Lot #...: D1K120223

MB Lot-Sample #: D1K200000-405

Work Order #...: EPA3A1AA

Matrix....: WATER

Prep Date....: 11/19/01 Prep Batch #...: 1324405

Analysis Time..: 10:59

Analysis Date..: 11/19/01

Dilution Factor: 1

ÐΙ	T D	$\cap$	ЭΨ.	TMC

	RESULT	KEPOKII	REFORTING	
PARAMETER		LIMIT	UNITS	METHOD
Benzene '	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	. ug/L	SW846 8260B
Bromodichloromethane	ŅD	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	. ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	.ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND .	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0 .	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND .	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B,
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

### GC/MS Volatiles

		REPORTI	NG		
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trichloro-	ND	1.0	ug/L	SW846 8260B	
benzene			3, –		
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	,
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
o-Xylene	ND	1.0	ug/L	SW846 8260B	
m-Xylene & p-Xylene	ND '	2.0	ug/L	SW846 8260B	
l,2-Dibromo-3-	ND	2.0	ug/L	SW846 8260B	
chloropropane (DBCP)			J.		
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B	
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS	<del></del>		
Dibromofluoromethane	103	(80 - 12	20)		
.,2-Dichloroethane-d4	100	(72 - 12	· 7. )		
-Bromofluorobenzene	. 101	(79 - 11	.9)		
Coluene-d8	99	(79 - 11	.9)		* .

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### GC/MS Volatiles

REPORTING

UNITS

METHOD

LIMIT

Client Lot #...: D1K120223 Work Order #...: EPFAE1AA Matrix.....: SOLID

MB Lot-Sample #: D1K210000-482

Prep Date....: 11/20/01 Analysis Time..: 11:23

Analysis Date..: 11/20/01 Prep Batch #...: 1325482

RESULT

Dilution Factor: 1

PARAMETER

Styrene

Toluene

1,1,1,2-Tetrachloroethane

1,1,2,2-Tetrachloroethane

1,2,3-Trichlorobenzene

Tetrachloroethene

1,2,4-Trichloro-

benzene

sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	. 10	ug/kg	SW846 8260B
Chloroform	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND .	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg .	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene '	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ŇD	5.0	ug/kg	SW846 8260B
Naphthalene	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B

(Continued on next page)

5.0

5.0

5.0

5.0

5.0

5.0

5.0

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

SW846 8260B

SW846 8260B

SW846 8260B

SW846 8260B

SW846 8260B

SW846 8260B

SW846 8260B .

ND

ND

ND

ND

ND

ND

ND

### GC/MS Volatiles

Client Lot #: D1K120223	Work Order #: EPFAE1AA			Matrix SOL	ID		
	•	REPORTI	NG				
PARAMETER	RESULT	LIMIT	UNITS	METHOD			
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B	-		
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B			
Trichloroethene	ND	5.0	ug/kg	SW846 8260B			
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B			
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B			
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B			
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B			
o-Xylene	ND	2.5	ug/kg	SW846 8260B			
m-Xylene & p-Xylene	ND	2.5	ug/kg	SW846 8260B			
1,2-Dibromo-3- chloropropane (DBCP)	ND	. 10	ug/kg	SW846 8260B			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846 8260B			
Bromobenzene	ND	5.0	ug/kg	SW846 8260B			
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B			
Bromodichloromethane	ND ·	5.0	ug/kg	SW846 8260B			
Bromoform	ND	5.0	ug/kg	SW846 8260B			
Bromomethane	ND	10	ug/kg	SW846 8260B			
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B			
	PERCENT	RECOVERY	· .	•			
SURROGATE	RECOVERY	LIMITS					
Dibromofluoromethane	113	(80 - 12	0)				
1,2-Dichloroethane-d4	110	(79 - 12					
4-Bromofluorobenzene	102	(71 - 13			•		
Toluene-d8	97	(77 - 11					
· ·							

NOTE (S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

### GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: EPE4M1AA Matrix.....: SOLID

MB Lot-Sample #: D1K210000-469

Prep Date.....: 11/19/01 Analysis Time..: 12:10

Analysis Date..: 11/19/01 Prep Batch #...: 1325469

Dilution Factor: 1

~		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND .	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND ·	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Chloroform	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND .	5.0	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
·1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
1,1-Dichloroethane	ND .	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0 ·	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Naphthalene	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	'5.0	ug/kg	SW846 8260B

(Continued on next page)

### GC/MS Volatiles

		REPORTI	NG		
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B	
Tetrachloroethene '	ND	5.0 .	ug/kg	SW846 8260B	
Toluene	ND '	5.0	ug/kg	SW846 8260B	
1,2,3-Trichlorobenzene	ND	5.0 ,	ug/kg	SW846 8260B	
1,2,4-Trichloro- benzene	ND	5.0	ug/kg	SW846 8260B	,
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B	
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B	
Trichloroethene	ND	5.0	ug/kg	SW846 8260B	
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B	
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B	
o-Xylene	ND .	2.5	ug/kg	SW846 8260B	
m-Xylene & p-Xylene	ND	2.5	ug/kg	SW846 8260B	
1,2-Dibromo-3- chloropropane (DBCP)	ND	10	ug/kg	SW846 8260B	.,,
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg ·	SW846 8260B	
	PERCENT	RECOVERY	7		
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	111	(80 - 12	20)		•
1,2-Dichloroethane-d4	105	(79 - 12			
4-Bromofluorobenzene	101	(71 - 13			
Toluene-d8	96	(77 - 11			

Calculations are performed before rounding to avoid round-off errors in calculated results.

### MATRIX SPIKE SAMPLE EVALUATION REPORT

### GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: ENP7G1DN-MS Matrix..... WATER

MS Lot-Sample #: D1K100172-007 ENP7G1DP-MSD

Date Sampled...: 11/08/01 13:00 Date Received..: 11/10/01
Prep Date....: 11/19/01 Analysis Date..: 11/19/01
Prep Batch #...: 1324405 Analysis Time..: 14:28

Dilution Factor: 1

	PERCENT .	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	93	(79 - 119)			SW846 8260B
	94	(79 - 119)	1.8	(0-20)	SW846 8260B
Benzene	101	(79 - 119)			SW846 8260B
	104	(79 - 119)	3.3	(0-20)	SW846 8260B
Chlorobenzene	87	(76 - 116)			SW846 8260B
·	86	(76 - 116)	0.70	(0-20)	SW846 8260B
Toluene	96	(75 - 122)			SW846 8260B
	96	(75 - 122)	0.61	(0-20)	SW846 8260B
Trichloroethene	104	(81 - 121)		* .	SW846 8260B
	107	(81 - 121)	2.6	(0-20)	SW846 8260B
					· ·
•		PERCENT		RECOVERY	
SURROGATE		RECOVERY		LIMITS	•
Dibromofluoromethane		103		(80 - 120	)
		105		(80 - 120)	
1,2-Dichloroethane-d4		102		(72 - 127)	)
	•	106		(72 - 127)	)
4-Bromofluorobenzene		102		(79 - 119)	•
		102	•	(79 - 119)	)
Toluene-d8		100		(79 - 119)	) <u>.</u>
		99	*.	(79 - 119)	) · · ·
		4			

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

NOTE(S):

### MATRIX SPIKE SAMPLE DATA REPORT

### GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: ENP7G1DN-MS Matrix..... WATER

MS Lot-Sample #: D1K100172-007 ENP7G1DP-MSD

CAMBLE COTER MEACON

Date Sampled...: 11/08/01 13:00 Date Received..: 11/10/01
Prep Date....: 11/19/01 Analysis Date..: 11/19/01

Prep Batch #...: 1324405 Analysis Time..: 14:28

Dilution Factor: 1

	SAMPLE	SPIKE	MEASRD		PERCENT		•	
PARAMETER	TINUOMA	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO	D
1,1-Dichloroethene	ND	10.0	9.27	ug/L	93			8260B
	ND	10.0	9.43	ug/L	94	1.8		8260B
Benzene	ND	10.0	10.1	ug/L	101			8260B
	ND	10.0	10.4	ug/L	104	3.3	SW846	8260B
Chlorobenzene	ND	10.0	8.67	ug/L	87		SW846	8260B
•	ND	10.0	8.61	ug/L	86	0.70	SW846	8260B
Toluene	ND	10.0	9.57	ug/L	96 .		SW846	8260B
	ND	10.0	9.62	ug/L	96	0.61	SW846	8260B
Trichloroethene	ND	10.0	10.4	ug/L	104		SW846	8260B
•	ND	10.0	10.7	ug/L	107	2.6	SW846	8260B
·			PERCENT		RECOVERY			
SURROGATE			DECOME.	T.P.				

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	103	(80 - 120)
	105	(80 - 120)
1,2-Dichloroethane-d4	102	(72 - 127)
	106	(72 - 127)
4-Bromofluorobenzene	102	(79 - 119)
· ·	102	(79 - 119)
Toluene-d8	100	(79 - 119)
	99	(79 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

### GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: EN3AJ1A8-MS Matrix.....: SOLID

MS Lot-Sample #: D1K150281-001 EN3AJ1A9-MSD

 Date Sampled...:
 11/12/01 08:15
 Date Received...:
 11/14/01

 Prep Date.....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325482
 Analysis Time...:
 12:24

 Dilution Factor:
 1
 % Moisture.....:
 0.0

D2 D 2 1 (2002)	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	99	(78 - 118)			SW846 8260B
	90	(78 - 118)	9.1	(0-25)	SW846 8260B
Benzene	105	(79 - 121)			SW846 8260B
	95	(79 - 121)	9.7	(0-25)	SW846 8260B
Chlorobenzene	83	(76 - 116)			SW846 8260B
	76	(76 - 116)	9.4	(0-25)	SW846 8260B
Toluene	88	(76 - 116)			SW846 8260B
	80	(76 - 116)	9.5	(0-25)	SW846 8260B
Trichloroethene	105	(83 - 123)			SW846 8260B
	91	(83 - 123)	14	(0-25)	SW846 8260B
•		PERCENT		RECOVERY	
SURROGATE	•	RECOVERY		LIMITS	
Dibromofluoromethane		114		(80 - 120)	<del>-</del> )
		102		(80 - 120)	
1,2-Dichloroethane-d4		110		(79 - 125)	
		102		(79 - 125)	
4-Bromofluorobenzene	<u>.</u>	101		(71 - 132)	
	, <b>*</b>	90	•	(71 - 132)	
Toluene-d8		94		(77 - 117)	
		88		(77 - 117)	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

NOTE(S):

#### MATRIX SPIKE SAMPLE DATA REPORT

### GC/MS Volatiles

UNITS

PERCENT

RECOVERY RPD

Client Lot #...: D1K120223 Work Order #...: EN3AJ1A8-MS Matrix.....: SOLID

MS Lot-Sample #: D1K150281-001 EN3AJ1A9-MSD

AMOUNT AMT

SAMPLE SPIKE MEASRD

 Date Sampled...:
 11/12/01 08:15
 Date Received...:
 11/14/01

 Prep Date.....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325482
 Analysis Time...:
 12:24

			12100111	ONTID		KED	PIE I HO	U .
1,1-Dichloroethene	ND	50.0	49.3	ug/kg	99		SW846	8260B
	ND	50.0	45.0	ug/kg	90	9.1	SW846	8260B
Benzene	ND	50.0	52.6	ug/kg	105		SW846	8260B
	ND	50.0	47.7	ug/kg	95	9.7	SW846	8260B
Chlorobenzene	ND	50.0	41.7	ug/kg	83		SW846	8260B
	ND	50.0	38.0	ug/kg	76	9.4	SW846	8260B
Toluene	ND	50.0	48.2	ug/kg	88		SW846	8260B
	ND	50.0	43.9	ug/kg	80	9.5	SW846	8260B
Trichloroethene	ND	50.0	52.3	ug/kg	105		SW846	8260B
	ND	50.0	45.3	ug/kg 🕖	91	14	SW846	8260B
							•	
			PERCENT		RECOVERY			
SURROGATE			RECOVER	Y	LIMITS			,
Dibromofluoromethane	. o	•	114		(80 - 120	<u> </u>		
			102	•	(80 - 120	5)		•
1,2-Dichloroethane-d4	*		110		(79 - 129	5)	•	
	•		102		(79 - 129	5)		
4-Bromofluorobenzene .	•		101		(71 - 132	2)		
			90		(71 - 132	2)		
Toluene-d8	•		94	x	(77 - 113			
**	4		88		(77 - 117	•		
						•		

NOTE (S):

PARAMETER

Calculations are performed before rounding to avoid round-off errors in calculated results.

### MATRIX SPIKE SAMPLE EVALUATION REPORT

### GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: ENQ511AN-MS Matrix...... SOLID

MS Lot-Sample #: D1K120137-022 ENQ511AP-MSD

Date Sampled...: 11/07/01 10:40 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #..: 1325469 Analysis Time..: 13:11

•	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	93	(78 - 118)			SW846 8260B
	101	(78 - 118)	8.6	(0-25)	SW846 8260B
Benzene	99	(79 - 121)			SW846 8260B
	109	(79 - 121)	9.9	(0-25)	SW846 8260B
Chlorobenzene	80	(76 - 116)			SW846 8260B
	87	(76 - 116)	8.8	(0-25)	SW846 8260B
Toluene	80	(76 - 116)			SW846 8260B
	89	(76 - 116)	10	(0-25)	SW846 8260B
Trichloroethene	96	(83 - 123)		•	SW846 8260B
	108	(83 - 123)	12	(0-25)	SW846 8260B
		PERCENT		BEGOLERA	
SURROGATE		RECOVERY		RECOVERY LIMITS	
Dibromofluoromethane	<del></del>	106	•	(80 - 120	<u>,                                     </u>
	\$	113		(80 - 120	•
1,2-Dichloroethane-d4		102		(79 - 125	
		109		(79 - 125	
4-Bromofluorobenzene		96		(73 - 123)	• '
		101		(71 - 132)	
Toluene-d8		88		(77 - 132)	
		94		(77 - 117)	•
· ·		J =		(// - 11/	)

### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

### MATRIX SPIKE SAMPLE DATA REPORT

### GC/MS Volatiles

Client Lot #...: D1K120223 Work Order #...: ENQ511AN-MS Matrix..... SOLID

MS Lot-Sample #: D1K120137-022 ENQ511AP-MSD

Date Sampled...: 11/07/01 10:40 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1325469 Analysis Time..: 13:11 Dilution Factor: 1 * Moisture....: 6.3

SAMPLE SPIKE MEASRD PERCENT PARAMETER AMOUNT AMT AMOUNT UNITS RECOVERY RPD METHOD 1,1-Dichloroethene ND 50.0 46.3 ug/kg 93 SW846 8260B ND 50.0 50.5 ug/kg 101 8.6 SW846 8260B Benzene ND 50.0 49.3 ug/kg SW846 8260B 99 ND 50.0 54.5 ug/kg 109 9.9 SW846 8260B Chlorobenzene ND 50.0 40.0 ug/kg 80 SW846 8260B ND 50.0 43.6 ug/kg 87 8.8 SW846 8260B Toluene ND 50.0 40.2 ug/kg 80 SW846 8260B ND 50.0 44.4 ug/kg 89 10 SW846 8260B Trichloroethene ND 50.0 48.1 ug/kg 96 SW846 8260B ND 50.0 54.2 ug/kg 108 12 SW846 8260B

SURROGATE		PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane		106	(80 - 120)
		113	(80 - 120)
1,2-Dichloroethane-d4	• •	102	(79 - 125)
		109	(79 - 125)
4-Bromofluorobenzene		96	(71 - 132)
		101	(71 - 132)
Toluene-d8		88	(77 - 117)
		94	(77 - 117)

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

### GC/MS Semivolatiles

Client Lot #...: D1K120223 Work Order #...: EPDK41AC Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-202

 Prep Date....:
 11/21/01
 Analysis Date..:
 11/25/01

 Prep Batch #...:
 1325202
 Analysis Time..:
 15:45

Dilution Factor: 1

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
Acenaphthene	71	(49 - 93)	SW846 8270C
Pyrene	74	(48 - 97)	SW846 8270C
4-Chloro-3-methylphenol	73	(52 - 93)	SW846 8270C
2-Chlorophenol	. 74	(51 - 91)	SW846 8270C
1,4-Dichlorobenzene	67	(46 - 86)	SW846 8270C
2,4-Dinitrotoluene	73	(53 - 105)	SW846 8270C
4-Nitrophenol	68	(29 - 115)	SW846 8270C
N-Nitrosodi-n-propyl- amine	71	(46 - 86)	SW846 8270C
Pentachlorophenol	68	(27 - 97)	SW846 8270C
Phenol	74	(50 - 90)	SW846 8270C
1,2,4-Trichloro-	70	(49 - 90)	SW846 8270C
benzene			
		PERCENT	RECOVERY
SURROGATE		RECOVERY	LIMITS
2-Fluorophenol		74	(34 - 97)
Phenol-d5		74	(39 - 90)

73

72

71

79

(33 - 97)

(39 - 91)

(29 - 95)

(30 - 102)

#### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Nitrobenzene-d5

Terphenyl-d14

2-Fluorobiphenyl

2,4,6-Tribromophenol

### LABORATORY CONTROL SAMPLE DATA REPORT

### GC/MS Semivolatiles

Client Lot #...: D1K120223 Work Order #...: EPDK41AC Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-202

 Prep Date....: 11/21/01
 Analysis Date..: 11/25/01

 Prep Batch #...: 1325202
 Analysis Time..: 15:45

Dilution Factor: 1

	SPIKE	MEASURED	•	PERCENT	
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	METHOD
Acenaphthene	3330	2370	ug/kg	71	SW846 8270C
Pyrene	3330	2460	ug/kg	74	SW846 8270C
4-Chloro-3-methylphenol	5000	3650	ug/kg	73	SW846 8270C
2-Chlorophenol	5000	3720	ug/kg	74	SW846 8270C
1,4-Dichlorobenzene	3330	2240	ug/kg	67	SW846 8270C
2,4-Dinitrotoluene	3330	2430	ug/kg	73	SW846 8270C
4-Nitrophenol	5000	3390	ug/kg	68	SW846 8270C
N-Nitrosodi-n-propyl- amine	3330	2370	ug/kg	71	SW846 8270C
Pentachlorophenol	5000	3400	ug/kg	68	SW846 8270C
Phenol	5000	3680	ug/kg	74	SW846 8270C
1,2,4-Trichloro- benzene	3330	2330	ug/kg	70	SW846 8270C SW846 8270C

•	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
2-Fluorophenol	74	(34 - 97)
Phenol-d5	74	(39 - 90)
Nitrobenzene-d5	73	(33 - 97)
2-Fluorobiphenyl	72	(39 - 91)
2,4,6-Tribromophenol	71	(29 - 95)
Terphenyl-d14	79	(30 - 102)

### NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

### GC/MS Semivolatiles

Client Lot #...: D1K120223

Work Order #...: EPDK41AA

Matrix....: SOLID

MB Lot-Sample #: D1K210000-202

Prep Date....: 11/21/01 Prep Batch #...: 1325202

Analysis Time..: 15:22

Analysis Date..: 11/25/01

Dilution Factor: 1

REPORTING

PARAMETER	RESULT	LIMIT	UNITS	METHOD
Acenaphthene	ND .	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
Benzo(b) fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k) fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Chrysene ,	ND	330	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl)	ND	330	ug/kg	. SW846 8270C
phthalate				
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C
			٠	
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
2-Fluorophenol	71	(34 - 97	')	
Phenol-d5	69	(39 - 90	)	
Nitrobenzene-d5	70	(33 - 97	')	•
2-Fluorobiphenyl	68	(39 - 91	.)	
2,4,6-Tribromophenol	63	(29 - 95	5)	
Terphenyl-d14	76	(30 - 10	2)	•
NOTE(S):				•

Calculations are performed before rounding to avoid round-off errors in calculated results.

### MATRIX SPIKE SAMPLE EVALUATION REPORT

### GC/MS Semivolatiles

Client Lot #...: D1K120223 Work Order #...: ENQ141AP-MS Matrix....: SOLID MS Lot-Sample #: D1K120137-004 ENQ141AQ-MSD

Date Sampled...: 11/09/01 09:20 Date Received..: 11/10/01 Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Prep Batch #...: 1325202 Analysis Time..: 18:04 Dilution Factor: 1 * Moisture....: 18

Nitrobenzene-d5

2-Fluorobiphenyl

2,4,6-Tribromophenol

•	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
Acenaphthene	66	(49 ~ 93)			SW846 8270C
	66	(49 - 93)	0.42	(0-40)	SW846 8270C
Pyrene	64	(48 - 97)	•	, .	SW846 8270C
	68	(48 - 97)	7.0	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	67	(52 - 93)			SW846 8270C
	68	(52 - 93)	0.72	(0-40)	SW846 8270C
2-Chlorophenol	68	(51 - 91)			SW846 8270C
	69	(51 - 91)	1.6	(0-36)	SW846 8270C
1,4-Dichlorobenzene	62	(46 - 86)			SW846 8270C
	61	(46 - 86)	2.5	(0-40)	SW846 8270C
2,4-Dinitrotoluene	70	(53 - 105)		•	SW846 8270C
	66	(53 - 105)	5.6	(0-40)	SW846 8270C
4-Nitrophenol	58 .	(29 - 115)		•	SW846 8270C
•	60	(29 - 115)	3.2	(0-40)	SW846 8270C,
N-Nitrosodi-n-propyl-	67	(46 - 86)		•	SW846 8270C
amine					
	67	(46 - 86)	0.60	(0-40)	SW846 8270C
Pentachlorophenol	60	(27 - 97)	.,		SW846 8270C
	64	(27 - 97)	6.1	(0-40)	SW846 8270C
Phenol	67	(50 - 90)			SW846 8270C
	67	(50 - 90)	0.48	(0-37)	SW846 8270C
1,2,4-Trichloro-	63	(49 - 90)			SW846 8270C
benzene	-		•		•
	63	(49 - 90)	1.2	(0-40)	SW846 8270C
,	•				,
		PERCENT		RECOVERY	
SURROGATE	<del>-</del>	RECOVERY		LIMITS	
2-Fluorophenol	4	68		(34 - 97)	<del>-</del>
	e e	66		(34 - 97)	
Phenol-d5		67	4,	(39 - 90)	
		65 .		(39 - 90)	

(Continued on next page)

66

67

65

65

68

67

(33 - 97)

(33. - 97)

(39 - 91)

(39 - 91)

(29 - 95)

(29 - 95)

### MATRIX SPIKE SAMPLE EVALUATION REPORT

### GC/MS Semivolatiles

Client Lot #...: D1K120223 Work Order #...: ENQ141AP-MS

Matrix..... SOLID

MS Lot-Sample #: D1K120137-004

ENQ141AQ-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	66	(30 - 102)
	67	(30 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

### MATRIX SPIKE SAMPLE DATA REPORT

### GC/MS Semivolatiles

Client Lot #...: D1K120223 Work Order #...: ENQ141AP-MS Matrix..... SOLID

MS Lot-Sample #: D1K120137-004 ENQ141AQ-MSD

Date Sampled...: 11/09/01 09:20 Date Received..: 11/10/01 Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Prep Batch #...: 1325202 Analysis Time..: 18:04

Dilution Factor: 1 * Moisture....: 18

•	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO	D
Acenaphthene	ND	3330	2210	ug/kg	66			8270C
	ND	3330	2200	ug/kg	66	0.42		8270C
Pyrene	ND	3330	2120	ug/kg	64			8270C
	ND	3330	2280	ug/kg	68	7.0	SW846	8270C
4-Chloro-3-methylphenol	ND	5000	3360	ug/kg	67		SW846	8270C
	ND	5000	3380	ug/kg	68	0.72	SW846	8270C
2-Chlorophenol	ND	5000	3380	ug/kg	68		SW846	8270C
	ND	5000	3440	ug/kg ʻ	69	1.6	SW846	8270C
1,4-Dichlorobenzene	ND	3330	2070	ug/kg	62		SW846	8270C
	ND	3330	2020	ug/kg	61	2.5	SW846	8270C
2,4-Dinitrotoluene	ND	3330	2320	ug/kg	70		SW846	8270C
	ND	3330	2190 .	ug/kg	66	5.6	SW846	8270C
4-Nitrophenol	ND	5000	2920	ug/kg	58 '		SW846	8270C
	ND	5000	3010	ug/kg	60	3.2	SW846	8270C
N-Nitrosodi-n-propyl- amine	ND	3330	2250	ug/kg	67		SW846	8270C
	ND .	3330	2240	ug/kg	67	0.60	SW846	8270C
Pentachlorophenol	ND	5000	3010	ug/kg	60		SW846	8270C
	ND	5000	3200	ug/kg	64	6.1	SW846	
Phenol	ND	5000	3330	ug/kg	67			8270C
	ND	5000	3350	ug/kg	67	0.48	SW846	
1,2,4-Trichloro-	ND	3330	2110	ug/kg	63		SW846	
benzene					*,			
	ND :	3330	2080	ug/kg	63	1.2	SW846	8270C
						•	•	
					*			
	•		PERCENT		RECOVERY		•	
SURROGATE			RECOVERY	<u></u>	LIMITS			•
2-Fluorophenol			68		(34 - 97)			•
			66 .		(34 - 97)			
Phenol-d5			67		(39 - 90)			
			65		(39 - 90)			
Nitrobenzene-d5		1,	66		(33 - 97)			
			67		(33 - 97)			
2-Fluorobiphenyl			65		(39 - 91)			
			65		(39 - 91)			
2,4,6-Tribromophenol			68		(29 - 95)			
		. (	67		(29 - 95)			

(Continued on next page)

#### MATRIX SPIKE SAMPLE DATA REPORT

### GC/MS Semivolatiles

Client Lot #...: D1K120223 Work Order #...: ENQ141AP-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-004 ENQ141AQ-MSD

 SURROGATE
 PERCENT
 RECOVERY

 Terphenyl-d14
 66
 (30 - 102)

 67
 (30 - 102)
 (30 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

### HOLD TIME REPORT

### HOLD TIME REPORT

Lab: GCMS VOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif	Ana Hold	Extraction Date	Analysis Date	Method Description
D1K120223013	B-79-20	11/08/01 1	3:35						
	8	•	8260B		11	14		11/19/01 11:3	3 VOA
D1K12O223O14	B-81-20	11/08/01 1	4:30						
			8260B.		11	14		11/19/01 11:5	4 VOA
D1K120223015	B-100-4	11/09/01 1	3:30						
,			8260B		11	14		11/20/01 20:3	4 VOA
D1K120223016	B-100-15	11/09/01 1	3:45						
			8260B		10	14	•	11/19/01 19:3	8 VOA
D1K120223017	B-102-18	11/09/01 1	4:50				-		
		•	8260B		10	14		11/19/01 12:1	6 VOA

### HOLD TIME REPORT

Lab: GCMS SEMIVOA

Lab ID #	Well ID	Collection Date	Method			Ext Hold	Ana Hold	Extraction Date		Analysis Date		Method Description
D1K120223015	B-100-4	11/09/01 1	3:30							•		
	***		8270C	12	· 4	14	40	11/21/01	08:30	11/25/01	20:45	DALA -
D1K120223016	B-100-15	11/09/01 13	3:45			• .				11/23/01	20:45	BNAS
•			8270C	12	4	14	40	11/21/01	08:30	11/25/01	21:08	BNAs

### HOLD TIME REPORT

Lab: METALS

									[		
Lab ID #	Well ID	Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date	Analysis Date		Method Descripti
D1K120223001	B-64-0.5	11/08/01	 15:15	_	_	<del></del>			_	<del></del>	
			6010B		10	,	180	•	11/18/01	19.36	TCD
			6010B	•	10		180		11/18/01	18:36	
			7471A		12		28		11/20/01		
D1K120223002	B-64-3	11/08/01	15:20						11/20/01	01.35	
		,,	6010B		10		180		11/18/01	10.52	ICD.
			6010B		10		180		11/18/01	18:52	
			7471A		12		28		11/20/01		101
D1K120223003	B-64-16	11/08/01	15:30						11/20/01	02.04	
			6010B		10		180		11/18/01	18:57	ī C P
			6010B		10		180		11/18/01	18:57	_
			7471A		12		28	•	11/20/01		101
D1K120223004	B-65-0.5	11/08/01	15:40						11/20/01	02.00	
			6010B		10		180		11/18/01	19:02	TCP
			6010B		10		180		11/18/01	19:02	
			7471A		12		28		11/20/01	02:07	101
D1K120223005	B-65-3	11/08/01 1	15:40					•			
			6010B		10		180		11/18/01	19:08	ICP
·			6010B		10		180		11/18/01	19:08	ICP
			7471A		12		28		11/20/01	02:09	
D1K120223006	B-65-16	11/08/01 1	5:55								
			6010B		10		180		11/18/01	19:13	ICF
			6010B		10		180		11/18/01	19:13	ICP
			7471A		12		28		11/20/01	02:11	
D1K120223007	B-66-0.5	11/08/01 1	6:30							•	
			6010B		10		180		11/18/01	19:18	ICP
			6010B		10		180	•	11/18/01	19:18	ICP
		*	7471A		12		28		11/20/01	02:12	
D1K120223008	B-66-3	11/08/01 1	6:30					•			
			6010B		10		180		11/18/01	19:23	ICP
•			6010B		10		180		11/18/01	19:23	ICP
			7471A		12		28 .		11/20/31	02:14	
D1K120223009	B-66-16	11/08/01 1	6:40								
		4	6010B		10		180 .		11/18/01	19:29	ICb
			6010B		10		180		11/18/01	19:29	ICP
			7471A		12		28		11/20/01	02:19	
D1K120223010	В-67-0.5	11/08/01 1	,								
			6010B		10		180		11/18/01	19:34	ICP
			6010B		10		180		11/18/01	19:34	ICP
			7471A		12		28		11/20/01	02:21	

### HOLD TIME REPORT

Lab: METALS

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif	Ana Hold	Extraction Date		Analysis Date	Method Description
D1K120223011	B-67-3	11/08/01 1	6:50					,		
			6010B		.10	180			11/18/01 19:39	O ICP
			6010B		10	180	•		11/18/01 19:39	ICP
			7471A		12	28			11/20/01 02:22	<u>}</u>
D1K120223012	B-67-16	11/08/01 16	6:55						•	
		•	6010B		10	180			11/18/01 19:55	ICP
			6010B		10	180			11/18/01 19:55	ICP
			7471A		12	28			11/20/01 02:24	4

### HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

Lab ID #	Well ID	Collection Date	Method	Ext Dif			Ana Hold		Analysis Date	Method Description
D1K120223001	B-64-0.5	11/08/01	15:15			•				
. •			160.3 MOD		18		99		11/26/01 15	:00
D1K120223002	B-64-3	11/08/01	15:20							
			160.3 MOD		18		99		11/26/01 15	:00
D1K120223003	B-64-16	11/08/01	15:30							•
. 19			160.3 MOD		18		99		11/26/01 15	: 00
D1K120223004	B-65-0.5	11/08/01	15:40							
			160.3 MOD		18		99		11/26/01 15	:00
D1K120223005	B-65-3	11/08/01	15:40							
			160.3 MOD		18		99		11/26/01 15	:00
D1K120223006	B-65-16	11/08/01	15:55							
			160.3 MOD		18		99	1	11/26/01 15	: 00
D1K120223007	B-66-0.5	11/08/01	16:30							
			160.3 MOD		18		99 -		11/26/01 15:	:00
D1K120223008	B-66-3	11/08/01	16:30							
•			, 160.3 MOD		18		99		11/26/01 15:	00
D1K120223009	B-66-16	11/08/01	16:40						,	
			160.3 MOD		18		99		11/26/01 15:	00
D1K120223010	B-67-0.5	11/08/01	16:50							
	•	•	160.3 MOD		18		99		11/26/01 15:	96
D1K120223011	B-67-3	11/08/01	16:50							
		-	160.3 MOD		18		99	~ .	11/26/01 15:	ର୍ଗ ବ୍ୟ
D1K120223012	B-67-16	11/08/01	16:55							•
		,	160.3 MOD		19		99		11/26/01 15:	. O
D1K120223015	B-100-4	11/09/01	13:30						•	
	,	·	160.3 MOD		17		99		11/26/01 15:	00
01K120223016	B-100-15	11/09/01	13:45						4.	
,	•		160.3 MOD		17		99	•	11/26/01 15:	CC

PAGE. 882 P. 03
TO 93834328925 Nov 12 2001 13:31
FROM CAMERON-COLE BOULDER
8 10 10 10 10 10 10 10 10 10 10 10 10 10

Chain of	
Custody	Record

STL Denver 4955 Yerrew Street Arveda, CO 80002



Severn Trent Laboratories, Inc.

1-1124 (1200) DID (00'00)	,												ı					36	, 3 <b>7</b> 0	rn	Tre	ent	Lab	ora	tori	38, k	TC.
Josep-Kleen (Wichita) Da	c Facility	20	Ka	1990 /	tan	sch	m	-(	90	.50	<b>y</b>	G	4)	)			Dete	11/	1/2	10	/	Ch	# # C	96	68	5	
2549 North New York Av	pare	rever	30	Mund P S	138	- {_{{_{1}}}}	<u>۱</u> ۲۲	7	3		139			<b></b>			LADA	lumbe	7			1	•	<u> </u>		~~	٠
Wiching The Sale And Mark And Miching	67219	I OVER L	-		Dun		T LAG	Con	(P)			.1.7				200	sie (	ARMO Is n	h Ned	iii d)	-		<b>To</b>	<u></u>	_ 4		<b>=</b>
No Wichita Fortality, WX			Mallay	bH M	Umber	<del>-</del> -L				<u> </u>	<u> </u>		80	2	8	かるでは				T					•		
1909 Pursitose Orden Quose Ma			T	M	batrix		T		Conta	NTHEY:	5		<b>a</b> co	Z)	3	1							Sp Co	ocai Iditio	iastri 13 of I	clions/ Proofp	<b>1</b> .
Sample I.O. No. and Description takes for each scope may be combined on one line.	Date	Time		1	3 3	1		Ř	ğ		3 3	П	Z	18/4	U-SSON A	Disolve	tac						<b>k</b> 1	1	Au		<u>.</u> .
3-64-0.5	11/8/01	1515	1		~\x		Ż		-	*	193	H		7			-		╬	┿	-	┝╌┤	No	<u>Te!</u>	型	80)1	Sam
1-64-3	11/8/01	1520		1	X	<del></del>	X		1		+	╀╌┨	$\neg +$	+	ij	-1	-	-+	- -	╁	╁┈	$\vdash$	ge	<u> </u>	Za	nwi	MA
1-64-16	11/8/01	1510	$\Box$		X	<del>'</del>	以			+	+	H	+	+	长		-		╁	╁	╁╌	┡╌┼		J8	0 .		<del></del>
-65-0.5	1/8/01	1540	$\sqcap$	7	X		X		+	†	1		+	+	方	_	H	+	- -	+-	$\vdash$			<del></del>		<del></del> .	
-65-3	4/8/01	1540	$\Box$	7	X	1	X		+	+	+-		_	+	长	*	Н	-	+	+-	$\vdash$	-			·		
-65-16	11/2/01	1577		十	X		X	7	-	+	+	H	-	+	代	<b>}</b>	$\vdash$	$\dashv$	╁	+		+					
-66-0.5	1/8/01	1630	11	十	Y	1	X	7	+	+	+		+	十	+3	<del>}</del>				┼	H	-	<del></del>	· 		··	
- 66 - 3	11/2/01	1630	11	_		*	欠	1	+	╁	1-			+	∜		$\vdash$	╌┼	+	┼~				·			
- 66 - 16		1640		_	文	#	X	7	-	+	╅┪	-	-	╁	分	╁┤	$\dashv$			+	┝╌┤	-	<del></del>				
67-65	Mesol	1650		十	X	-	K	ᆉ	+	┿	╁┤		+	+	叔			+	+-	╂	┝┤	+		·			
67 - 3	118/01	1650	1	+	分	╂╌┨	T	+	+	+-	+	-		╁	父	┼	$\dashv$	+		1-1		_					
67-16	110/01	1657		_	X	H	<del> </del>	+	+	+-	╂╌┨			+	X	$\vdash$	-	+	╁	-	Ш	4			·		<del></del>
le Hanned MacMedian			30	male (	D/spor	المراية	T.		L_	ــــــــــــــــــــــــــــــــــــــ	11	_1.		_	Ļ	1_1				اا		上					~~
n-Hasend   Phonosopho   Shin hebund   C Hannel Time Required Hanne   40 Hours   7 Days   50 14 Day		) Unknown		Mely	vn To (	Chlend	10	DA CA	egula pesse	By L	s (Spe	ON)	rhim	For	==		Manth	· h	the u	had 3	MOUT PLOOM	ha)	N Jemph	4 144 1	of almost		
Thomas	F [] 31 [4] M	Outo	<u></u>	-	liate	<u></u>	= ,	l. Ale	pelved	By		<del></del>				~	<del></del> -	<del></del>				100	<del></del>		Time		
White the second		Dete		1,	lano		1	Re	newed	Ву		<del></del>										100	ie .	¦	Time	·	
Skibber by		Date		L,	ima		3	Rec	celved.	By	<del></del>			·—.								100	10		Tatoe	<del></del>	
Progre Call Kay Tou	wher	1 mm	rdi	-L		· · ·	_ <u>_</u>	<u>,                                    </u>		····	٠	ا اند	ماهلاء									<u></u>	<del></del>			<del></del>	

PAGE.003

# Chain of Custody Record

STL Denvey 4955 Varyow Street Arvade, CO 80002



Severn Trent Laboratories, Inc.

Clear C C L K L Cover L L L	r. R.	Protot	Mari	""		<u></u>		$\widehat{C}$						}	a	F)	7	11	10	÷	<u> </u>		T	hain	A CO	068	žA	<b>,</b>
Safety-Klaza (Wichita) 2549 North New York	lumur	Talagai		135	1/m 1/m	الله ح	25	×	30	<u>~</u>	- f	23,	US P -	· 5			1	at M	un ba	<i>-1</i>			+	Pays			, _2_	_
wichita ks	87219		MISO Ea		4.3		K	COM	wo/ ₆	d	22		_		>		nely pre s	60 (A	12.0	290	NO.							
Project Name and Lecenter (State)  S-14 Listchista Fig. c.ilik, March 180  Double of Parch stee Challenge Ma. 1	, Ks	Califfian		OUN WEN	19467 									3											Speci	iai insi Nona a	ructions/ I Receipt	
	•		Ì	Me	trin			þ	Conta 1030		n a Nes		ŀ	त्रः	ξŀċ	Š	1	<b>\</b>	1	- [	1	1	1		0010			
Sample LD. No. and Description Conspirers for each sample may be cambined an one likely	Date	7%ne	•	1	1 3		1	Š	8	ş	ğ	1		SE											No	لف	AU 8	ລ
8-79-20	11/8/01	1335		X						X	I			X			L			$oldsymbol{\bot}$		•	$\perp$		Sas	mpl	ia a	e
3-81-20	11/8/01	1434		又						X				X		T _V	$\int_{-\infty}^{\infty}$					_[			0/0	m	oishe	_
B-100 - 4	4/9/01	1330.			K		X					一	$\exists$	X	7	P	Τ					1	T	T	a			_
B-100-15	4/9/-1	1345			X		X			7			W	X		रा	T						7	Τ.				
3-102-11	1/9/01	1450			X	1	又				7			X	1	T		П			1	7	$\top$	T				
					7	1				寸	7		J	7	7	1	1			7			$\top$	1	<del></del>			_
					十	1			J	ᅱ	쿡	1		7	7	1	T				7	7	7	7				_
					丰	<b> </b> -						7	7	1	1	1	1	T		7	7	7	7	1	*******		<del></del>	~
					+	†~	$\sqcap$					_	7	7	十	+	1				1	7	十	1				
					十	†	T			_		7	7	7	†	†	†				7	7	7	1	*****		······································	~
	<b> </b>			1	#	丰				ᅥ		-	-	1	+	+	十			7	7	7	十	1				
	<del> </del>		1	$\vdash$	╁	†	$\Box$	=			-	7	•	+	十	十	十	$\mathbf{H}$			7	7	+	+	**	•	*****	~~
Papalite / Galled filestflor(line	<b></b>	ļ	- 1	enab i			<u></u> i		لبيا	اا		لمب	L	_1.		-Ļ-	٠.	ــــــــــــــــــــــــــــــــــــــ	ليبا	// h	l 10/710				l'assigles	are rate	ined	
Non-Hissard   Flanemable   Shin limbant	Palson 8	Landono M		] 1000	en To	Clien	H (		Xapes Rees					indani	e Fe	_	===	Mon	(t) p	Anny	w In	n 3	Marrito Marrito	4)				_
1 20 Hours 1 49 Hours 1 7 Days 1 14 O	1940 - 🔲 21 (29)	a □ 0¥	har				_	QU.	- <del></del>		M.U.S.	( <del>T</del>	uig)														•	
Hodriquidad by La M Congress	<u></u>	Date			Time			1. 1	MORA	ed E	7								-					104		"	178	_
. Melinquiched By	· · · · · · · · · · · · · · · · · · ·	Delo	*****	.	Time	••		2 /	lecelu	ed E	ly	-						-				-		0	<b>&gt;</b>	1"	179	
s. Pedin quickyod By		Cate	<del></del> -	1	rane	<del></del>	_	18	ece ly	ed i	ץ			~	~								<del></del> .	jos	le .	I No	TO B	
A Mean call Kan Trusch	10/144	ante/	<u> </u>	ا لبروا	4	<u></u>	I	1	est		or.						~~~											

78



STL Denver

4955 Yarrow Street Arvada, CO 80002-4517

Tel: 303 736 0100 Fax: 303 431 7171 www.stl-inc.com

### ANALYTICAL REPORT REVISED

### SAFETY KLEEN (WICHITA, KS)

Lot #: D1K120155

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue, Suite 100 Boulder, CO 80301

> cc: Will Huskie cc: John Arbuthnot

SEVERN TRENT LABORATORIES, INC.

Kae E. Yoder Project Manager

January 15, 2002

This report shall not be reproduced except in full, without the written approval of the laboratory

### **Table Of Contents**

### Standard Deliverables

### **Report Contents**

### Total Number of Pages

### Standard Deliverables

The Cover Letter and the Report Cover page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.



- Table of Contents
- Case Narrative
- Executive Summary Detection Highlights
- Methods Summary
- Method/Analyst Summary
- Lot Sample Summary
- Analytical Results
- QC Data Association Summary
- Hold Time Report
- Chain-of-Custody

### **CASE NARRATIVE**

REVISED

Client Name:

Safety-Kleen (Wichita)

Project Name:

Project Number:

Sample Delivery Group: D1K120155
Original Narrative Date: 12/04/01

Revised Narrative Date:

01/15/02

### Sample Receipt

Twenty-one solid samples and two water samples, submitted by Safety-Kleen (Wichita), Inc., were received by STL Denver on November 10, 2001, according to documented sample acceptance procedures. The samples were received intact at temperatures of 2.7°C, 4.5°C and 3.8°C. Analyses requested on the associated chains-of-custody are as follows: GC/MS Volatiles, GC/MS Semivolatiles and Total Metals.

Discrepancies were noted between the analyses requested on the chains-of-custody and the analyses requested on the sample container labels. As instructed by the client on November 12, 2001, analyses were performed per the chain-of-custody. No other anomalies were encountered during sample receipt.

### **GC/MS Volatiles**

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
B-76-4	Tetrachloroethene	610	25	ug/kg
B-76-16	Tetrachloroethene	• 5800	250	ug/kg
B-57-15	Ethylbenzene	35	5.0	ug/kg
	m-Xylene & p-Xylene	150	2.5	ug/kg
	o-Xylene	50	2.5	ug/kg
	Tetrachloroethene	16	5.0	ug/kg
	n-Butylbenzene	400	250	ug/kg
	Napthalene	310	250	ug/kg
	n-Propylbenzene	370	250	ug/kg
	1.2.4-Trimethylbenzene	2400	250	ug/kg
	1.3.5-Trimethylbenzene	510	250	ug/kg
B-49-4	cis-1,2-Dichloroethene	2.9	2.5	ug/kg
	Tetrachloroethene	33	5.0	ug/kg
	Trichloroethene	6.8	5.0	ug/kg
	Tetrachloroethene	11	5.0	ug/kg
B-55-3	Tetrachloroethene	27	5.0	ug/kg
	Trichloroethene	15	5.0	ug/kg
	Tetrachloroethene	200	5.0	ug/kg
	Tetrachloroethene	490	25	ug/kg
	Tetrachloroethene	300	13	ug/L
	1,1,1-Trichloroethane	47 .	13	ug/L
	Trichloroethene	20	13	ug/L
	Tetrachloroethene	28000	1200	ug/kg
	Tetrachloroethene	690	25	ug/kg
B-46-17	Tetrachloroethene	1300	40	ug/L
	Trichloroethene	40 i	40 :	ug/L

The samples were analyzed within holding time and without incident, with the exception of the following items noted.

- Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to matrix interference, samples B-76-16, B-52-15 and B-46-2 had to be analyzed using the medium-level methanol preparation procedure. The reporting limits have been adjusted accordingly.
- Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. In some cases, due to analytes present above the linear calibration curve, samples had to be analyzed at a dilution. For samples analyzed at a dilution, the reporting limits have been adjusted relative to the dilution required. The following table details the associated dilutions.

Sample ID	Dilution
B-76-4	1:5
B-45-14	1:5
B-45-15 ·	1:13.33
B-46-2	1:4.75
B-46-13	1:5
B-46-17	1:40

➤ Client specific, as well as, standard batch MS/MSD has been provided. All spike parameters were within QC control limits with the exception of the items noted in the following table. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data; therefore, corrective action is deemed unnecessary.

QC Batch/		MS	MSD	Recovery		RPD
Specific Sample	Parameter	%Rec	%Rec	Limits	RPD	Limits
QC Batch 1323350	1,1-Dichloroethene	72	69	78-118	4.9	0-25
	Benzene	67	66	79-121	1.5	0-25
	Chlorobenzene	61	62	76-116	1.6	0-25
	Toluene	63	62	76-116	0.51	0-25
,	Trichloroethene	67	65	83-123	3.7	0-25
B-57-15	1,1-Dichloroethene	68	70	78-118	2.2	0-25
	Benzene	64	68	79-121	5.0	0-25
	Chlorobenzene	60.	62	76-116	3.6	0-25
	Toluene	59	64	76-116	7.6	0-25
	Trichloroethene	67	67	83-123	0.49	0-25

### GC/MS Semivolatiles

> Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs. The samples were analyzed within holding time and without incident.

### Total Metals

Sample analysis revealed detectable concentrations at or above Safety-Kleen (Wichita)'s RLs, as detailed in the Executive Summary-Detection Highlights Report. The sample was analyzed within holding time and without incident.

### Revisions

The revisions included in this report are as follows:

- 1. GC/MS Semivolatiles Additional compounds, bis (2-Ethylhexyl) phthalate and Dimethyl phthalate, have been reported for samples B-49-4 and B-49-15, as requested.
- 2. GC/MS Semivolatiles As requested, the laboratory looked for any detectable concentrations present above the method detection limit (MDL) but below the reporting limit. None were found. The MDLs have been printed on the analytical data pages.

These data and reporting limits are being used specifically to meet the needs of this project. All RLs are supported by STL Denver's Method Detection Limits (MDLs). Reporting limits in this report are at or above the MDL.

I certify that the data presented in this report are accurate, complete, and meets the minimum quality assurance standards in 40-CFR 136, 40-CFR 141, and/or SW846. The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. An assessment of the quality of the data, noting any exceptions, outliers, and/or problems encountered have been narrated herein.

Kae E. Yoder

Project Manager

Date

### **EXECUTIVE SUMMARY - Detection Highlights**

			REPORTING		ANALY		
PARAMETER	<u>R</u>	ESULT	LIMIT	UNITS	METHO	)	
B-70-18 11/07/01 11:45 001				a a			
Lead	1	5	0.80	mg/kg		6010B	
Barium	1	6.6	1.0	mg/kg	SW846	6010B	
Chromium	[*]	4	1.0	mg/kg	SW846	6010B	
Percent Moisture	3	3.5	0.10	<b>ે</b>	MCAWW	160.3	MOD
B-76-4 11/07/01 13:30 002							
Tetrachloroethene	6	510	25	ug/kg	SW846	8260B	
Percent Moisture	2	20.8	0.10	ક	MCAWW	160.3	MOD
					•	-	
B-76-16 11/07/01 13:50 003							
Tetrachloroethene	5	800	250	ug/kg	SW846	8260B	
Percent Moisture	-	4.2	0.10	* *		160.3	MOD
B-57-4 11/07/01 14:04 004				•			
Percent Moisture	1	.7.7	0.10	<b>%</b>	MCAWW	160.3	MOD
B-57-15 11/07/01 14:20 005						*	
				,		4.*	
Ethylbenzene	3	5	5.0	ug/kg	SW846	8260B	
m-Xylene & p-Xylene	1	.50 .	2.5	ug/kg	SW846	8260B	
o-Xylene	5	0	2.5	ug/kg	SW846	8260B	
Percent Moisture		.4.7	0.10	8	MCAWW	160.3	MOD
B-58-4 11/07/01 14:45 006	•		ı.				
Tetrachloroethene		.6	5.0	ug/kg	SW846	8260B	
Percent Moisture		.8.2	0.10	ag/ng %		160.3	MOD
refeeld morstare		.0.2	0.10	·			
B-58-16 11/07/01 15:00 007	•						
Percent Moisture	1	.7.9	0.10	8	MCAWW	160.3	MOD
B-52-4 11/07/01 15:20 008				Q.			
Percent Moisture	1	.9.4	0.10	%	MCAWW	160.3	MOD
	(Continued	l on nex	t page)				

### **EXECUTIVE SUMMARY - Detection Highlights**

		REPORTI	NG	ANALYTICAL
PARAMETER	RESULT	LIMIT	UNITS	METHOD
			<u> </u>	PETROD
B-52-15 11/07/01 15:35 009		•	•	
	•			
n-Butylbenzene	400	250	ug/kg	SW846 8260B
Naphthalene	310	250	ug/kg	SW846 8260B
n-Propylbenzene	370	250	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	2400	250	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	510	250	ug/kg	SW846 8260B
Percent Moisture	2.7	0.10	ક	MCAWW 160.3 MOD
B-51-4 11/07/01 15:45 010				
Percent Moisture	17.3	0.10	<b>&amp;</b>	MCAWW 160.3 MOD
B-51-15 11/07/01 15:55 011	• ,			
Percent Moisture	13.4	0.10	%	MCAWW 160.3 MOD
B-49-4 11/07/01 16:20 012				
cis-1,2-Dichloroethene	2.9	2 5		
Tetrachloroethene	33	2.5	ug/kg	SW846 8260B
Trichloroethene	6.8		ug/kg	SW846 8260B
Percent Moisture	17.1	5.0	ug/kg	SW846 8260B
	17.1	0.10	<b>%</b>	MCAWW 160.3 MOD
B-49-15 11/07/01 16:35 013			•	
Tetrachloroethene	11	5.0	ug/kg	0110.4.6
Percent Moisture	18.3	0.10	ug/kg %	SW846 8260B MCAWW 160.3 MOD
B-55-17 11/06/01 16:15 014			•	MCANN 100.3 MOD
Percent Moisture	14.5	0.10	96	MCAWW 160.3 MOD
B-55-3 11/06/01 15:30 015				
Tetrachloroethene	27	5.0	/1	
Trichloroethene	15	5.0	ug/kg	SW846 8260B
Percent Moisture	16.5	0.10	ug/kg *	SW846 8260B
	20.5	0.10	6	MCAWW 160.3 MOD
B-49-4 11/08/01 08:25 016				
Percent Moisture	16.8	0.10	8	MCAWW 160.3 MOD
(Cor.	tinued on next	page)	•	

### **EXECUTIVE SUMMARY - Detection Highlights**

•		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
	PARAMETER	RESULI	DIPLI	01110	
B-49-1	5 11/08/01 08:35 017		•	,	
	Percent Moisture	14.7	0.10	ફ	MCAWW 160.3 MOD
B-45-4	11/08/01 08:50 018				
	Tetrachloroethene	200	5.0	ug/kg	SW846 8260B
	Percent Moisture	19.6	0.10	ક	MCAWW 160.3 MOD
B-45-1	.4 11/08/01 09:05 019				
	Tetrachloroethene	490	25	ug/kg	SW846 8260B
	Percent Moisture	25.4	0.10	8	MCAWW 160.3 MOD
B-45-1	5 11/08/01 09:15 020				
•	Tetrachloroethene	300	13	ug/L	SW846 8260B
	1,1,1-Trichloroethane	47	13	ug/L	SW846 8260B
	Trichloroethene	20 .	13	ug/L	SW846 8260B
B-46-2	2 11/08/01 09:35 021			٠	
	Tetrachloroethene	28000	1200	ug/kg	SW846 8260B
	Percent Moisture	15.8	0.10	<b>ક</b>	MCAWW 160.3 MOD
B-46-1	13 11/08/01 09:50 022				
	Tetrachloroethene	690	25	ug/kġ	SW846 8260B
	Percent Moisture	15.8	0.10	8	MCAWW 160.3 MOD
B-46-1	17 11/08/01 10:00 023				
	Tetrachloroethene	1300	40	ug/L	SW846 8260B
	Trichloroethene	40	40	ug/L	SW846 8260B

### **METHODS SUMMARY**

### D1K120155

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals Mercury in Solid Waste (Manual Cold-Vapor)	SW846 6010B SW846 7471A	SW846 3050B
Percent Moisture	MCAWW 160.3 MOD	SW846 7471A MCAWW 160.3 MOD
Semivolatile Organic Compounds by GC/MS Trace Inductively Coupled Plasma (ICP) Metals	SW846 8270C	SW846 3550B
Volatile Organics by GC/MS	SW846 6010B SW846 8260B	SW846 3050B SW846 5030
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

### References:

MCAWW	"Methods for	Chemical	Analysis	of Water	and	Wastes",
	EPA-600/4-79-					

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

### METHOD / ANALYST SUMMARY

ANALYTICA	J.		ANALYST
METHOD		ANALYST	<u>ID</u>
MCAWW 160	3 MOD	Nathan Lovstad	000090
SW846 601		Lynn-Anne Trudell	006645
SW846 747		Thomas Lill	006929
SW846 826		Dan Appelhans	001008
SW846 826		Mike Armstrong	002544
SW846 826	0B	Nathan Henry	004397
SW846 827	0C	Xiayasang Leewaphath	006600
Reference	es:		
			* **
MCAWW	"Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.		
SW846		Evaluating Solid Waste, Physica Lition, November 1986 and its up	

## SAMPLE SUMMARY

#### D1K120155

WO #	SAMPLE#	CLIENT	SAMPLE	ID		SAMPLED DATE	SAMP TIME
ENQ6W	001	B-70-18				11/07/01	13.45
ENQ65	002	B-76-4				11/07/01	
ENQ7C	003	B-76-16					
ENQ7J	004	B-57-4				11/07/01	
ENQ7P	005	B-57-15				11/07/01	
ENQ7V	006	B-58-4				11/07/01	
ENQ70	007	B-58-16				11/07/01	
ENQ71	008	B-52-4				11/07/01	
ENQ72	009	B-52-15		1.		11/07/01	
ENRDJ	010	B-51-4				11/07/01	
ENRDT	011	B-51-15				11/07/01	
ENRDW	012	B-49-4				11/07/01	
ENRD1	013	B-49-15			•	11/07/01	
ENRD2		B-55-17				11/07/01	
ENRD5		B-55-3				11/06/01	
ENRD8		B-49-4				11/06/01	
ENREH		B-49-15				11/08/01	
ENREM		B-45-4				11/08/01	
ENREN		B-45-14				11/08/01	
ENRE0		B-45-15				11/08/01	
ENRE1		B-46-2				11/08/01	
ENRE2		B-46-13			•	11/08/01	
ENRE4		B-46-13 B-46-17				11/08/01	09:50
2111114	023	D-40-T/	•			11/08/01	10:00

#### NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

#### Client Sample ID: B-70-18

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-001 Work Order #...: ENQ6W1AA Matrix.....: SOLID

Date Sampled...: 11/07/01 11:45 Date Received..: 11/10/01
Prep Date....: 11/17/01 Analysis Date..: 11/17/01
Prep Batch #...: 1323350 Analysis Time..: 12:47

Dilution Factor: 1

* Moisture....: 3.5 Method....: SW846 8260B

	•	REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND .	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform `	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND ,	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND ,	5.0	ug/kg

### Client Sample ID: B-70-18

Lot-Sample #: D1K120155-001	Work Order #: ENQ6W1AA	Matrix SOLID
-----------------------------	------------------------	--------------

	•	REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND .	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro- benzene	ND	5.0	ug/kg
1,1,1-Trichloroethane	3.700	· _	
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	5.0	ug/kg
1,2,3-Trichloropropane	ND	10	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	5.0	ug/kg
o-Xylene	ND	2.5	ug/kg
O-kylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	•
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	111	(80 - 120)	
1,2-Dichloroethane-d4	120	(79 - 125)	
4-Bromofluorobenzene	101	(71 - 132)	
Toluene-d8	96	(77 - 117)	

#### Client Sample ID: B-76-4

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-002 Work Order #...: ENQ651AA Matrix.....: SOLID

Date Sampled...: 11/07/01 13:30 Date Received..: 11/10/01 Prep Date.....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324469 Analysis Time..: 19:49

Dilution Factor: 5

**% Moisture....:** 21 **Method.....:** SW846 8260B

•		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	25	ug/kg
Bromobenzene	ND	25	ug/kg
Bromochloromethane	ND	25	ug/kg
Bromodichloromethane	ND	25	ug/kg
Bromoform	ND	25	ug/kg
Bromomethane	ND	50	ug/kg
n-Butylbenzene	ND	25	ug/kg
sec-Butylbenzene	ND	25	ug/kg
tert-Butylbenzene	ND	25	ug/kg
Carbon tetrachloride	ND	25	ug/kg
Chlorobenzene	ND	25	ug/kg
Chlorodibromomethane	ND	25	ug/kg
Chloroethane	ND	50	ug/kg
Chloroform	ND	50	ug/kg
Chloromethane	ND	50	ug/kg
2-Chlorotoluene	ND	25 ·	ug/kg
4-Chlorotoluene	ND	25	ug/kg
1,2-Dibromo-3-	. ND	50	ug/kg
chloropropane (DBCP)		•	
1,2-Dibromoethane (EDB)	ND	. 25	ug/kg -
Dibromomethane	ND	25	ug/kg
1,2-Dichlorobenzene	ND	25	ug/kg
1,3-Dichlorobenzene	ND	25	ug/kg
1,4-Dichlorobenzene	ND	25	ug/kg
Dichlorodifluoromethane	ND	50	ug/kg
1,1-Dichloroethane	ND	25	ug/kg
1,2-Dichloroethane	ND	25	ug/kg
cis-1,2-Dichloroethene	ND	. 12	ug/kg
trans-1,2-Dichloroethene	ND	12	ug/kg
1,1-Dichloroethene	ND	25	ug/kg
1,2-Dichloropropane	ND	25	ug/kg
1,3-Dichloropropane	ND	25	ug/kg
2,2-Dichloropropane	ND	25	ug/kg
1,1-Dichloropropene	ND	25	ug/kg
Ethylbenzene	ND	25	ug/kg
Hexachlorobutadiene	ND	25	ug/kg
Isopropylbenzene	ND	25	ug/kg
p-Isopropyltoluene	ND	25	ug/kg

## Client Sample ID: B-76-4

Lot-Sample #: Di	1K120155-002 Wo	rk Order	<b>#:</b>	ENQ651AA	Matrix:	SOLID
------------------	-----------------	----------	-----------	----------	---------	-------

	,	REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	25	ug/kg
Naphthalene	. ND	25	ug/kg
n-Propylbenzene	ND	25	ug/kg
Styrene	ND	25	ug/kg
1,1,1,2-Tetrachloroethane	ND	25	ug/kg
1,1,2,2-Tetrachloroethane	ND	25	ug/kg
Tetrachloroethene	610	25	ug/kg
Toluene	ND .	25	ug/kg
1,2,3-Trichlorobenzene	ND	25	ug/kg
1,2,4-Trichloro-	ND	25	ug/kg
benzene	,		-373
1,1,1-Trichloroethane	ND	25	ug/kg
1,1,2-Trichloroethane	ND	25	ug/kg
Trichloroethene	ND	25	ug/kg
Trichlorofluoromethane	ND	50	ug/kg
1,2,3-Trichloropropane	ND	25	ug/kg
1,2,4-Trimethylbenzene	ND	25	ug/kg
1,3,5-Trimethylbenzene	ND	25	ug/kg
Vinyl chloride	ND	. 25	ug/kg
m-Xylene & p-Xylene	ND	12	ug/kg
o-Xylene	ND	12	ug/kg
			-5/ 1.5
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	104	(80 - 120)	· · · · · · · · · · · · · · · · · · ·
1,2-Dichloroethane-d4	109	(79 - 125)	
4-Bromofluorobenzene	104	(71 - 132)	775
Toluene-d8	102	(77 - 117)	

#### Client Sample ID: B-76-16

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-003 Work Order #...: ENQ7C1AA Matrix.....: SOLID

Date Sampled...: 11/07/01 13:50 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/20/01 Prep Batch #...: 1330178 Analysis Time..: 14:01

Dilution Factor: 1

**% Moisture....:** 14 Method.....: SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	250	ug/kg
Bromobenzene	ND	250	ug/kg
Bromochloromethane	ND	250	ug/kg
Bromodichloromethane	ND	250	ug/kg
Bromoform	ND,	250	ug/kg
Bromomethane	ND	500	ug/kg
n-Butylbenzene	ND ·	250	ug/kg
sec-Butylbenzene	ND	250	ug/kg
tert-Butylbenzene	ND	250	ug/kg
Carbon tetrachloride	ND	250	ug/kg
Chlorobenzene	ND	250	ug/kg
Chlorodibromomethane	ND	250	ug/kg
Chloroethane	ND	500	ug/kg
Chloroform	ND	500	ug/kg
Chloromethane	ND	500	ug/kg
2-Chlorotoluene	ND	250	ug/kg
4-Chlorotoluene	ND	250	ug/kg
1,2-Dibromo-3-	ND	500	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	250	ug/kg
Dibromomethane	ND ,	250	ug/kg
1,2-Dichlorobenzene	ND	250	ug/kg
1,3-Dichlorobenzene	ND	250	ug/kg
1,4-Dichlorobenzene	ND	250	ug/kg
Dichlorodifluoromethane	ND	500	ug/kg
1,1-Dichloroethane	ND	250	ug/kg
1,2-Dichloroethane	ND	250	ug/kg
cis-1,2-Dichloroethene	ND	120	ug/kg
trans-1,2-Dichloroethene	ND	120	ug/kg
1,1-Dichloroethene	ND	250	ug/kg
1,2-Dichloropropane	ND	250	ug/kg
1,3-Dichloropropane	ND	250	ug/kg
2,2-Dichloropropane	ND	250	ug/kg
1,1-Dichloropropene	ND	250	ug/kg
Ethylbenzene	ND	250	ug/kg
Hexachlorobutadiene	ND	250	ug/kg
Isopropylbenzene	ND	250	ug/kg
p-Isopropyltoluene	ND	250	ug/kg

## Client Sample ID: B-76-16

Lot-Sample #: D1K120155-003	Work Order #: ENQ7C1AA	Matrix SOLID
	WOLL OLGEL W DING/CIAM	Macrix SULID

	* · · · · ·	*	•
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	250	ug/kg
Naphthalene	ND	250	ug/kg
n-Propylbenzene	ND	250	ug/kg
Styrene	ND	250	ug/kg
1,1,1,2-Tetrachloroethane	ND	250 [°]	ug/kg
1,1,2,2-Tetrachloroethane	ND	250	ug/kg
Tetrachloroethene	5800	250	ug/kg
Toluene	ND	250	ug/kg
1,2,3-Trichlorobenzene	ND	250	ug/kg
1,2,4-Trichloro-	ND	250	ug/kg
benzene			, 3, 3
1,1,1-Trichloroethane	ND	250	ug/kg
1,1,2-Trichloroethane	ND	250	ug/kg
Trichloroethene	ND	250	ug/kg
Trichlorofluoromethane	ND	500	ug/kg
1,2,3-Trichloropropane	ND	250	ug/kg
1,2,4-Trimethylbenzene	ND	250	ug/kg
1,3,5-Trimethylbenzene	ND	250	ug/kg
Vinyl chloride	ND	250	ug/kg
m-Xylene & p-Xylene	ND	120	ug/kg
o-Xylene	ND	120	ug/kg
	*		
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	92	(72 - 121)	
1,2-Dichloroethane-d4	88	(53 - 131)	
4-Bromofluorobenzene	102	(71 - 127)	•
Toluene-d8	97	(57 - 130)	•

#### Client Sample ID: B-57-4

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-004 Work Order #...: ENQ7J1AA Matrix....: SOLID

Date Sampled...: 11/07/01 14:04 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324469 Analysis Time..: 15:44

Dilution Factor: 1

* Moisture....: 18 Method.....: SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND .	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND .	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND .	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0 .	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

# Client Sample ID: B-57-4

Lot-Sample #: D1K12	20155-004 Work Order	#: ENQ7J1AA	Matrix:	SOLID
---------------------	----------------------	-------------	---------	-------

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	A
Methylene chloride	ND	5.0	ug/kg	*
Naphthalene	ND	5.0	ug/kg	
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND	5.0	ug/kg	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
Tetrachloroethene	ND	5.0	ug/kg .	
Toluene	ND	5.0	ug/kg	
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	•
1,2,4-Trichloro-	ND	5.0	ug/kg	
benzene	* •			
1,1,1-Trichloroethane	ND	5.0	ug/kg	
1,1,2-Trichloroethane	ND .	5.0	ug/kg	
Trichloroethene	ND	5.0	ug/kg	
Trichlorofluoromethane	ND	10	ug/kg	
1,2,3-Trichloropropane	ND	5.0	ug/kg	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
Vinyl chloride	ND	5.0	ug/kg	
m-Xylene & p-Xylene	ND	2.5	ug/kg	•
o-Xylene	ND	2.5	ug/kg	
			J. J	•
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS	•	•
Dibromofluoromethane	102	(80 - 120)		
1,2-Dichloroethane-d4	103	(79 - 125)		
4-Bromofluorobenzene	100	(71 - 132)	*	
Toluene-d8	100	(77 - 117)		•

#### Client Sample ID: B-57-15

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-005 Work Order #...: ENQ7P1AA Matrix.....: SOLID

Date Sampled...: 11/07/01 14:20 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324469 Analysis Time..: 16:11

Dilution Factor: 1

**% Moisture....:** 15 **Method.....:** SW846 8260B

•		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0.	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	·ug/kg
Chloromethane	ND .	10 .	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	, ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0 •	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	35	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg *
Isopropylbenzene	ND .	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

### Client Sample ID: B-57-15

### GC/MS Volatiles

Lot-Sample #: D1K120155-005	Work Order #	: ENQ7P1AA	Matrix SOLID
	•	REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND -	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND .	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND :	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	150	2.5	ug/kg
o-Xylene	50	2.5	ug/kg
	•		
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	106	(80 - 120)	
1,2-Dichloroethane-d4	111	(79 - 125)	
4-Bromofluorobenzene	99	(71 - 132)	
Tolyone do			

100

Toluene-d8

(77 - 117)

#### Client Sample ID: B-58-4

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-006 Work Order #...: ENQ7V1AA Matrix.....: SOLID

Date Sampled...: 11/07/01 14:45 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324469 Analysis Time..: 17:32

Dilution Factor: 1

**% Moisture....:** 18 **Method.....:** SW846 8260B

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	MD ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND .	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)		the second section	
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kģ
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane '	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	. 2.5	ug/kg
1,1-Dichloroethene	NĎ	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND .	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

## Client Sample ID: B-58-4

Loc-sample #: DIKI20155-006	Work Order	#:	ENQ7V1AA	Matrix:	SOLID
	•.				
			REPORTING	4	

		REPORTING				
PARAMETER	RESULT,	LIMIT	UNITS			
Methylene chloride	ND	5.0	ug/kg	<del></del>		
Naphthalene	ND	5.0	ug/kg		• •	
n-Propylbenzene	ND	5.0	ug/kg			
Styrene	ND	5.0	ug/kg			
1,1,1,2-Tetrachloroethane	ND	g 5.0	ug/kg			
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg		•	
Tetrachloroethene	16	5.0	ug/kg			
Toluene	ND	, 5.0	ug/kg			
1,2,3-Trichlorobenzene	ND	5.0	ug/kg			
1,2,4-Trichloro-	ND .	5.0	ug/kg			
benzene	4	•	5, 5			
1,1,1-Trichloroethane	ND	5.0	ug/kg			
1,1,2-Trichloroethane	ND	5.0	ug/kg			
Trichloroethene	, ND	5.0	ug/kg			
Trichlorofluoromethane	ND	10	ug/kg			
1,2,3-Trichloropropane	ND	5.0	ug/kg			
1,2,4-Trimethylbenzene	ND	5.0	ug/kg			
1,3,5-Trimethylbenzene	ND	5.0	ug/kg			
Vinyl chloride	ND	5.0	ug/kg			
m-Xylene & p-Xylene	ND	2.5	ug/kg			
o-Xylene	ND	2.5	ug/kg			
	PERCENT	RECOVERY			•	
SURROGATE	RECOVERY	LIMITS	1.5			
Dibromofluoromethane	104	(80 - 120)	÷			
1,2-Dichloroethane-d4	104	(79 - 125)		•	*	
4-Bromofluorobenzene	102	(71 - 132)				
Toluene-d8	97	(77 - 117)				

#### Client Sample ID: B-58-16

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-007 Work Order #...: ENQ701AA Matrix.....: SOLID

Date Sampled...: 11/07/01 15:00 Date Received..: 11/10/01 Prep Date....: 11/17/01 Analysis Date..: 11/17/01 Prep Batch #...: 1323350 Analysis Time..: 15:03

Dilution Factor: 1

**% Moisture....:** 18 **Method.....:** SW846 8260B

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kġ
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			•
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg /
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg ·
Dichlorodifluoromethane	ND	10	ug/kgʻ
1,1-Dichloroethane	, ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	NĎ	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

# Client Sample ID: B-58-16

Lot-Sample #: D1K120155-007	Work Order #: ENQ701AA	Matrix SOLID
-----------------------------	------------------------	--------------

		REPORTIN	G		
PARAMETER	RESULT	LIMIT	UNITS		
Methylene chloride	ND	5.0	ug/kg		4 - 2
Naphthalene	ND	5.0	ug/kg		
n-Propylbenzene	ND	5.0	ug/kg		
Styrene	ND ,	5.0	ug/kg		
1,1,1,2-Tetrachloroethane	ND ·	5.0	ug/kg		
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg		
Tetrachloroethene	ND	5.0	ug/kg		
Toluene	ND	5.0	ug/kg		•
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	•	
1,2,4-Trichloro-	ND	5.0	ug/kg		
benzene		•			*
1,1,1-Trichloroethane	ND	5.0	ug/kg		•
1,1,2-Trichloroethane	ND	5.0	ug/kg		
Trichloroethene	ND	5.0	`ug/kg		
Trichlorofluoromethane	ND	10	ug/kg	٠	
1,2,3-Trichloropropane	ND	5.0	ug/kg		-
1,2,4-Trimethylbenzene	ND	5.0	ug/kg		
1,3,5-Trimethylbenzene	ND	5.0	ug/kg		
Vinyl chloride	ND	5.0	ug/kg		
m-Xylene & p-Xylene	ND	2.5	ug/kg		
o-Xylene	ND	2.5	ug/kg		
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	113	(80 - 120	0)		
1,2-Dichloroethane-d4	122	(79 - 125			
4-Bromofluorobenzene	106	(71 - 132	2)		
Toluene-d8	99	(77 - 11	7)		
· · · · · · · · · · · · · · · · · · ·			-		

### Client Sample ID: B-52-4

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-008 Work Order #...: ENQ711AA Matrix.....: SOLID

Date Sampled...: 11/07/01 15:20 Date Received..: 11/10/01 Prep Date....: 11/17/01 Analysis Date..: 11/17/01 Prep Batch #...: 1323350 Analysis Time..: 15:30

Dilution Factor: 1

* Moisture....: 19 Method.....: SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND '	10	ug/kg
n-Butylbenzene	· ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10 .	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	, ug/kg
1,2-Dichloroethane	ND ·	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

### Client Sample ID: B-52-4

### .GC/MS Volatiles

Matrix....: SOLID

		ŧ		
		REPORTING		•
PARAMETER	RESULT	LIMIT	UNITS	
Methylene chloride	ND	5.0	ug/kg	•
Naphthalene	ND	5.0	ug/kg	
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND	5.0	ug/kg	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
Tetrachloroethene	ND	5.0	ug/kg	
Toluene	ND	5.0	ug/kg	
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
1,2,4-Trichloro- benzene	ND	5.0	ug/kg	
1,1,1-Trichloroethane	ND	5.0	ug/kg	
1,1,2-Trichloroethane	ND	5.0	ug/kg	· ·
Trichloroethene	ND	5.0	ug/kg	÷ .
Trichlorofluoromethane	ND	10	ug/kg	
1,2,3-Trichloropropane	ŅD	5.0	ug/kg	
1,2,4-Trimethylbenzene	ND ·	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
Vinyl chloride	ND	5.0	ug/kg	
m-Xylene & p-Xylene	ND	2.5	ug/kg	
o-Xylene	ND	2.5	ug/kg	

•	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	114	(80 - 120)
1,2-Dichloroethane-d4	125	(79 - 125)
4-Bromofluorobenzene	108	(71 - 132)
Toluene-d8	103	(77 - 117)

Lot-Sample #...: D1K120155-008 Work Order #...: ENQ711AA

#### Client Sample ID: B-52-15

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-009 Work Order #...: ENQ721AA Matrix.....: SOLID

Date Sampled...: 11/07/01 15:35 Date Received..: 11/10/01 Prep Date....: 11/17/01 Analysis Date..: 11/17/01 Prep Batch #...: 1323329 Analysis Time..: 18:46

Dilution Factor: 1

**% Moisture....:** 2.7 **Method.....:** SW846 8260B

		DEDODUTA	J.C.
B1 B1 C C C C C C C C C C C C C C C C C	DECITE OF	REPORTII	UNITS
PARAMETER	RESULT ND	<u>LIMIT</u> 250	ug/kg
Benzene		250	ug/kg ug/kg
Bromobenzene	ND	250	ug/kg ug/kg
Bromochloromethane	ND		
Bromodichloromethane	, ND	250	ug/kg
Bromoform	ND	250	ug/kg
Bromomethane	ND	500	ug/kg
n-Butylbenzene	400	250	ug/kg
sec-Butylbenzene	ND	250	ug/kg
tert-Butylbenzene	ND	250	ug/kg
Carbon tetrachloride	ND	250	ug/kg
Chlorobenzene	ND	250	ug/kg
Chlorodibromomethane	ND	250	ug/kg
Chloroethane	ND	500	ug/kg
Chloroform	ND	500	ug/kg
Chloromethane	ND	500	ug/kg
2-Chlorotoluene	ND	250	ug/kg
4-Chlorotoluene	ND	250	ug/kg
1,2-Dibromo-3-	ND	500	ug/kg
chloropropane (DBCP)		•	
1,2-Dibromoethane (EDB)	ND	250	ug/kg
Dibromomethane	ND	250	ug/kg
1,2-Dichlorobenzene	ND	250	ug/kg
1,3-Dichlorobenzene	ND	250	ug/kg
1,4-Dichlorobenzene	ND	250	ug/kg
Dichlorodifluoromethane	ND	500	ug/kg
1,1-Dichloroethane	ND	. 250	ug/kg
1,2-Dichloroethane	ND	250	ug/kg
cis-1,2-Dichloroethene	ND	120	ug/kg
trans-1,2-Dichloroethene	ND .	120	ug/kg
1,1-Dichloroethene	ND	250	ug/kg
1,2-Dichloropropane	ND	250	ug/kg
1,3-Dichloropropane	ND	250	ug/kg
2,2-Dichloropropane	ND	250	ug/kg
1,1-Dichloropropene	ND	250	ug/kg
Ethylbenzene	ND	250	ug/kg
Hexachlorobutadiene	ND	250	ug/kg
Isopropylbenzene	ND	250	ug/kg
p-Isopropyltoluene	ND	250	ug/kg

### Client Sample ID: B-52-15

Lot-Sample #: D1K12	0155-009 Work Order	#: ENQ721AA	Matrix:	SOLID

		REPORTING	3		
PARAMETER	RESULT	LIMIT	UNITS		
Methylene chloride	, ND	250	ug/kg		
Naphthalene	310	250	ug/kg		
n-Propylbenzene	370	250	ug/kg		
Styrene	ND	250	ug/kg		
1,1,1,2-Tetrachloroethane	ND	250	ug/kg		
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	•	
Tetrachloroethene	ND	250	ug/kg		
Toluene	ND	250	ug/kg	•	
1,2,3-Trichlorobenzene	ND	250	ug/kg		
1,2,4-Trichloro- benzene	ND	250	ug/kg		
1,1,1-Trichloroethane	ND	250	ug/kg		
1,1,2-Trichloroethane	ND	250	ug/kg		
Trichloroethene	ND	250	ug/kg		
Trichlorofluoromethane	ND	500	ug/kg		
1,2,3-Trichloropropane	ND	250	ug/kg		
1,2,4-Trimethylbenzene	2400	250	ug/kg		
1,3,5-Trimethylbenzene	510	250	ug/kg		
Vinyl chloride	ND	250	ug/kg		
m-Xylene & p-Xylene	ND	120 .	ug/kg		
o-Xylene	ND	120	ug/kg		
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	95	(72 - 121	)		
1,2-Dichloroethane-d4	85	(53 - 131	)		
4-Bromofluorobenzene	98	(71 - 127	)		
Toluene-d8	100	(57 - 130	) :		

#### Client Sample ID: B-51-4

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-010 Work Order #...: ENRDJ1AA Matrix.....: SOLID

Date Sampled...: 11/07/01 15:45 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324469 Analysis Time..: 18:00

Dilution Factor: 1

* Moisture....: 17 Method.....: SW846 8260B

		REPORTIN	iG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			J. J
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

# Client Sample ID: B-51-4

TOC-Sampre #:	DTKT70T22-0T0	MOTY OTGET	# ENKDUIAA	Mactia	. 30111

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	_
Methylene chloride	ND	5:0	ug/kg	•
Naphthalene	ND	5.0	ug/kg	
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND -	5.0	ug/kg	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	**
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
Tetrachloroethene	ND	5.0	ug/kg	
Toluene	ND	5.0	ug/kg	
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
1,2,4-Trichloro-	ND	5.0	ug/kg	
benzene		•	-	
1,1,1-Trichloroethane	ND .	5.0	ug/kg	
1,1,2-Trichloroethane	ND	5.0	ug/kg	
Trichloroethene	ND	5.0	ug/kg	
Trichlorofluoromethane	ND	10	ug/kg	
1,2,3-Trichloropropane	ND	5.0	ug/kg	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	•
Vinyl chloride	ND	5.0	ug/kg	
m-Xylene & p-Xylene	ND	2.5	ug/kg	
o-Xylene	ND	2.5	ug/kg	
•	PERCENT	RECOVERY	<i>;</i>	
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	101	(80 - 120)		. *
1,2-Dichloroethane-d4	101	(79 - 125)	*	
4-Bromofluorobenzene	105	(71 - 132)		
Toluene-d8	100	(77 - 117)		

#### Client Sample ID: B-51-15

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-011 Work Order #...: ENRDT1AA Matrix...... SOLID

 Date Sampled...:
 11/07/01 15:55
 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324469
 Analysis Time...:
 18:27

Dilution Factor: 1

* Moisture....: 13 Method.....: SW846 8260B

	•	REPORTIN	īG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene .	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND .	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10 ·	ug/kg
Chloromethane	ND	. 10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)		•	3, ···3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND .	5.0	ug/kg
Hexachlorobutadiene	ND .	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg
	•		J. J

### Client Sample ID: B-51-15

Lot-Sample #: D1K120155-011	Work Order	#: ENRDT1AA	Matrix Solid

		REPORTING	, ,		
PARAMETER	RESULT	LIMIT	UNITS	·	•
Methylene chloride	ND	5.0	ug/kg		E.
Naphthalene	ND	5.0	ug/kg		
n-Propylbenzene	ND	5.0	ug/kg		
Styrene	ND	5.0	ug/kg		
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg		
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg		
Tetrachloroethene	ND	5.0	ug/kg		
Toluene	ND	5.0	ug/kg		
1,2,3-Trichlorobenzene	ND	5.0	ug/kg		
1,2,4-Trichloro-	ND	5.0	ug/kg		
benzene		·.			
1,1,1-Trichloroethane	ND	5.0	ug/kg		
1,1,2-Trichloroethane	ND	5.0	ug/kg		•
Trichloroethene	ND	5.0	ug/kg		
Trichlorofluoromethane	ND	10	ug/kg		
1,2,3-Trichloropropane	ND	5.0	ug/kg		
1,2,4-Trimethylbenzene	ND	5.0	ug/kg		
1,3,5-Trimethylbenzene	ND	5.0	ug/kg		
Vinyl chloride	ND	5.0	ug/kg		
m-Xylene & p-Xylene	ND	2.5	ug/kg		
o-Xylene	ND	2.5	ug/kg		
				•	
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS	_		
Dibromofluoromethane	102	(80 - 120	)		
1,2-Dichloroethane-d4	103	(79 - 125	)		
4-Bromofluorobenzene	101	(71 - 132	)		
Toluene-d8	98	(77 - 117	)		· •

### Client Sample ID: B-49-4

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-012 Work Order #...: ENRDW1AA Matrix.....: SOLID

Date Sampled...: 11/07/01 16:20 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324469 Analysis Time..: 18:55

Dilution Factor: 1

% Moisture....: 17 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTI	
Benzene	ND ND	<u>LIMIT</u> 5.0	UNITS
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND		ug/kg
n-Butylbenzene	ND	10 5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND		ug/kg
Chlorobenzene	ND	5.0 5.0	ug/kg
Chlorodibromomethane	ND		ug/kg
Chloroethane	ND	5.0	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	10 5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND		ug/kg
chloropropane (DBCP)	ND	10	ug/kg
1,2-Dibromoethane (EDB)	ND	5.0	/1
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	2.9	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND		ug/kg
o-Isopropyltoluene	ND .	5.0	ug/kg
_ <b></b> .	*12	5.0	ug/kg

### Client Sample ID: B-49-4

### GC/MS Volatiles

Lot-Sample #: D1K120155-012	Work Order #:	ENRDW1AA	Matrix SOLID
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND .	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND .	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	33	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND ,	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	6.8	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND .	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
*			
	PERCENT	RECOVERY	
SURROGATE	RECOVERY .	LIMITS	
Dibromofluoromethane	103	(80 - 120)	
1,2-Dichloroethane-d4	106	(79 - 125)	•
4-Bromofluorobenzene	103	(71 - 132)	
Toluene-d8	100	(77 - 117)	
. *			

### Client Sample ID: B-49-15

### GC/MS Volatiles

Lot-Sample #...: D1K120155-013 Work Order #...: ENRD11AA Matrix...... SOLID

Date Sampled...: 11/07/01 16:35 Date Received..: 11/10/01 Prep Date.....: 11/17/01 Analysis Date..: 11/17/01 Prep Batch #...: 1323350 Analysis Time..: 17:19

Dilution Factor: 1

**% Moisture....:** 18 **Method.....:** SW846 8260B

		REPORTIN	REPORTING	
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	5.0	ug/kg	
Bromobenzene	ND	5.0	ug/kg	
Bromochloromethane	ND	5.0	ug/kg	
Bromodichloromethane	ND	5.0	ug/kg	
Bromoform	ND	5.0	ug/kg	
Bromomethane	ND	10	ug/kg	
n-Butylbenzene	ND	5.0	ug/kg	
sec-Butylbenzene	ND	5.0	ug/kg	
tert-Butylbenzene	ND · ,	5.0	ug/kg	
Carbon tetrachloride	ND	5.0	ug/kg	
Chlorobenzene	ND	5.0	ug/kg	
Chlorodibromomethane	ND	5.0	ug/kg	
Chloroethane	ND	10	ug/kg	
Chloroform	ND	10	ug/kg	
Chloromethane	ND	10	ug/kg	
2-Chlorotoluene	ND	5.0	ug/kg	
4-Chlorotoluene	ND	5.0	ug/kg	
1,2-Dibromo-3-	ND	10	ug/kg	
chloropropane (DBCP)		_,	~5/ 1.5	
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	
Dibromomethane	ND	5.0	ug/kg	
1,2-Dichlorobenzene	ND	5.0	ug/kg	
1,3-Dichlorobenzene	ND	5.0	ug/kg	
1,4-Dichlorobenzene	ND	5.0	ug/kg	
Dichlorodifluoromethane	ND	10	ug/kg	
1,1-Dichloroethane	ND	5.0	ug/kg	
1,2-Dichloroethane	ND	5.0	ug/kg	
cis-1,2-Dichloroethene	ND	2.5	ug/kg	
trans-1,2-Dichloroethene	ND :	2.5	ug/kg	
1,1-Dichloroethene	ND	5.0	ug/kg	
1,2-Dichloropropane	ND	5.0	ug/kg	
1,3-Dichloropropane	ND	5.0	ug/kg	
2,2-Dichloropropane	ND	5.0	ug/kg	
1,1-Dichloropropene	ND	5.0	ug/kg	
Ethylbenzene	ND	5.0	ug/kg	
Hexachlorobutadiene	ND	5.0	ug/kg	
Isopropylbenzene	ND	5.0	ug/kg	
p-Isopropyltoluene	, ND	5.0	ug/kg	

### Client Sample ID: B-49-15

Lot-Sample #: D1K120155-013	Work Order	#: ENRD11AA	Matrix SOLID
-----------------------------	------------	-------------	--------------

		~	4 1	
		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
Methylene chloride	ND	5.0	ug/kg	
Naphthalene	ND	5.0	ug/kg	
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND	5.0	ug/kg	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	-
Tetrachloroethene	11	5.0	ug/kg	, and
Toluene	ND	5.0	ug/kg	
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
1,2,4-Trichloro-	ND	5.0	ug/kg	
benzene		•	•	
1,1,1-Trichloroethane	ND	5.0	ug/kg	
1,1,2-Trichloroethane	ND	5.0	ug/kg	
Trichloroethene	, ND	5.0	ug/kg	
Trichlorofluoromethane	ND	10	ug/kg	
1,2,3-Trichloropropane	ND	5.0	ug/kg	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
Vinyl chloride	ND	5.0	ug/kg	
m-Xylene & p-Xylene	ND	2.5	ug/kg	
o-Xylene	ND	2.5	ug/kg	
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS	<u> </u>	
Dibromofluoromethane	112	(80 - 120)		
1,2-Dichloroethane-d4	125	(79 - 125)	· · · · · · · · · · · · · · · · · · ·	
4-Bromofluorobenzene	104	(71 - 132)		
Toluene-d8	100	(77 - 117)		

#### Client Sample ID: B-55-17

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-014 Work Order #...: ENRD21AA Matrix...... SOLID

 Date Sampled...:
 11/06/01 16:15
 Date Received...:
 11/10/01

 Prep Date.....:
 11/17/01
 Analysis Date...:
 11/17/01

 Prep Batch #...:
 1323350
 Analysis Time...:
 17:47

Dilution Factor: 1

*** Moisture....:** 15 **Method.....:** SW846 8260B

		REPORTI	NG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane .	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	-10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			575
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND .	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

### Client Sample ID: B-55-17

Lot-Sample #: D1K120155-014	Work Order #: ENRD21AA	Matrix SOLID
-----------------------------	------------------------	--------------

D. D. 147997D	RESULT	REPORTING LIMIT	UNITS	
PARAMETER Methylene chloride	ND	5.0	ug/kg	<del></del> -
	ND	5.0	ug/kg ug/kg	
Naphthalene	ND	5.0	ug/kg ug/kg	
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND	5.0	ug/kg ug/kg	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg ug/kg	
1,1,2,2-Tetrachloroethane		5.0	ug/kg ug/kg	
Tetrachloroethene	ND			
Toluene	ND	5.0	ug/kg	
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
1,2,4-Trichloro-	ND	5.0	ug/kg	
benzene		<b>5</b> 0	/1	
1,1,1-Trichloroethane	ND	5.0	ug/kg	
1,1,2-Trichloroethane	ND	5.0	ug/kg	
Trichloroethene	ND	5.0	ug/kg	
Trichlorofluoromethane	ND	10	ug/kg	
1,2,3-Trichloropropane	ND .	5.0	ug/kg	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	• •
Vinyl chloride	ND	5.0	ug/kg	
m-Xylene & p-Xylene	ND	2.5	ug/kg	
o-Xylene	ND	2.5	ug/kg	,
	PERCENT	RECOVERY		•
GITTO CONTE	RECOVERY	LIMITS	•	
SURROGATE	113	(80 - 120	<del>-</del>	
Dibromofluoromethane				
1,2-Dichloroethane-d4	122	(79 - 125		
4-Bromofluorobenzene	106	(71 - 132		
Toluene-d8	99	(77 - 117	)	

#### Client Sample ID: B-55-3

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-015 Work Order #...: ENRD51AA Matrix...... SOLID

Date Sampled...: 11/06/01 15:30 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324469 Analysis Time..: 15:17

Dilution Factor: 1

**Method**....: SW846 8260B

		REPORTI	1G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND -	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			5,5
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg ,
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene .	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

### Client Sample ID: B-55-3

Lot-Sample #: D1K120155-015	Work Order #:	ENRD51AA	Matrix: SOLID
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0'	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	27	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro- benzene	ND	5.0 '	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	, 5.0	ug/kg
Trichloroethene	15	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND .	5.0	ug/kg
1,2,4-Trimethylbenzene	· ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg.
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	, MD	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	103	(80 - 120)	
1,2-Dichloroethane-d4	106	(79 - 125)	
4-Bromofluorobenzene	106	(71 - 132)	-
Toluene-d8	105	(77 - 117)	

#### Client Sample ID: B-45-4

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-018 Work Order #...: ENREM1AA Matrix...... SOLID

 Date Sampled...:
 11/08/01 08:50
 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324469
 Analysis Time...:
 19:22

Dilution Factor: 1

*** Moisture....:** 20 **Method.....:** SW846 8260B

,		REPORTIN	G	
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	5.0	ug/kg	
Bromobenzene	ND	5.0	ug/kg	
Bromochloromethane	ND	5.0	ug/kg	
Bromodichloromethane .	ND	5.0	ug/kg	, '
Bromoform	ND	5.0	ug/kg	
Bromomethane	ND	10	ug/kg	
n-Butylbenzene	ND	5.0	ug/kg	
sec-Butylbenzene	ND .	5.0	ug/kg	
tert-Butylbenzene	ND	5.0	ug/kg	
Carbon tetrachloride	ND	5.0	ug/kg	
Chlorobenzene	ND	5.0	ug/kg	•
Chlorodibromomethane	ND	5.0	ug/kg	
Chloroethane	ND	10	ug/kg	
. Chloroform	ND	10	ug/kg	
Chloromethane	ND	10	ug/kg	
2-Chlorotoluene .	ND .	5.0	ug/kg	
4-Chlorotoluene	ND	5.0	ug/kg	
1,2-Dibromo-3-	ND	10	ug/kg	
chloropropane (DBCP)		•	3 3	
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	
Dibromomethane	ND	5.0	ug/kg	
1,2-Dichlorobenzene	ND	5.0	ug/kg	
1,3-Dichlorobenzene	ND	5.0	ug/kg	
1,4-Dichlorobenzene	ND	5.0	ug/kg	
Dichlorodifluoromethane	ND	10	ug/kg	
1,1-Dichloroethane	ND .	5.0	ug/kg	
1,2-Dichloroethane	ND .	5.0	ug/kg	
cis-1,2-Dichloroethene	ND	2.5	ug/kg	
trans-1,2-Dichloroethene	ND	2.5	ug/kg	
1,1-Dichloroethene	ND +	5.0	ug/kg	
1,2-Dichloropropane	ND	5.0	ug/kg	
1,3-Dichloropropane	ND	5.0	ug/kg	
2,2-Dichloropropane	ND	5.0	ug/kg	
1,1-Dichloropropene	ND	5.0	ug/kg	
Ethylbenzene	ND	5.0	ug/kg	
Hexachlorobutadiene	ND	5.0	ug/kg	
Isopropylbenzene	ND	5.0	ug/kg	
p-Isopropyltoluene	ND	5.0	ug/kg	

### Client Sample ID: B-45-4

### GC/MS Volatiles

Lot-Sample #: D1K120155-018	Work Order #:	ENREM1AA	Matrix SOLID
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	200	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND '	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
		7.5501.FF71/	
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	- -
Dibromofluoromethane	105	(80 - 120)	
1,2-Dichloroethane-d4	108	(79 - 125)	
4-Bromofluorobenzene	103	(71 - 132)	

104

Toluene-d8

(77 - 117)

#### Client Sample ID: B-45-14

### GC/MS Volatiles

Lot-Sample #...: D1K120155-019 Work Order #...: ENREN1AA Matrix...... SOLID

Date Sampled...: 11/08/01 09:05 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Prep Batch #...: 1324469 Analysis Time..: 20:17

Dilution Factor: 5

		REPORTIN	IG	
PARAMETER	RESULT	LIMIT	UNITS	
Benzene `	ND	25	ug/kg	_
Bromobenzene	ND	25	ug/kg	
Bromochloromethane	ND	25	ug/kg	
Bromodichloromethane	ND	25	ug/kg	
Bromoform	ND	25	ug/kg	
Bromomethane	ND	50	ug/kg	
n-Butylbenzene	ND	25	ug/kg	
sec-Butylbenzene	ND	25	ug/kg	
tert-Butylbenzene	ND	25	ug/kg	
. Carbon tetrachloride	ND	25	ug/kg	
Chlorobenzene	ND	25	ug/kg	
Chlorodibromomethane	ND	25	ug/kg	
Chloroethane	ND	50	ug/kg	
Chloroform	ND	50	ug/kg	
Chloromethane	ND	50	ug/kg	
2-Chlorotoluene	ND	25	ug/kg	
4-Chlorotoluene	ND .	25	ug/kg	
1,2-Dibromo-3-	ND	50	ug/kg	
chloropropane (DBCP)			~5/9	
1,2-Dibromoethane (EDB)	ND	25	ug/kg	
Dibromomethane	ND	25	ug/kg	
1,2-Dichlorobenzene	ND	25	ug/kg	
1,3-Dichlorobenzene	ND	25	ug/kg	
1,4-Dichlorobenzene	ND	25	ug/kg	
Dichlorodifluoromethane	ND	50	ug/kg	
1,1-Dichloroethane	ND	25	ug/kg	
1,2-Dichloroethane	ND ·	25	ug/kg	
cis-1,2-Dichloroethene	ND	12	ug/kg	
trans-1,2-Dichloroethene	ND	12	ug/kg	
1,1-Dichloroethene	ND	25	ug/kg	
1,2-Dichloropropane	ND	25	ug/kg	
1,3-Dichloropropane	ND	25	ug/kg	
2,2-Dichloropropane	ND	25	ug/kg	
1,1-Dichloropropene	ND	25	ug/kg	
Ethylbenzene	ND	25	ug/kg	
Hexachlorobutadiene ·	ND	25	ug/kg	
Isopropylbenzene	ND	25	ug/kg	
p-Isopropyltoluene	ND	25	ug/kg	
•		•	- 3/ 3	

## Client Sample ID: B-45-14

				•
	•	REPORTING	•	
PARAMETER	RESULT	LIMIT	UNITS	_
Methylene chloride	ND	25	ug/kg	. *
Naphthalene	ND	<b>~</b> 25	ug/kg	
n-Propylbenzene	ND	25	ug/kg ˙	
Styrene	ND	25	ug/kg	
1,1,1,2-Tetrachloroethane	ND	25	ug/kg	
1,1,2,2-Tetrachloroethane	ND	25	ug/kg	
Tetrachloroethene	490	25	ug/kgʻ	
Toluene	ND	25	ug/kg	
1,2,3-Trichlorobenzene	ND	25	ug/kg	
1,2,4-Trichloro-	ND.	25	ug/kg	
benzene				
1,1,1-Trichloroethane	ND	25	ug/kg	v.
1,1,2-Trichloroethane	ND	25	ug/kg	1
Trichloroethene	ND	25	ug/kg	•
Trichlorofluoromethane	ND	50	ug/kg	
1,2,3-Trichloropropane	ND	25	ug/kg	
1,2,4-Trimethylbenzene	ND	25	ug/kg	
1,3,5-Trimethylbenzene	ND	25 4	ug/kg	
Vinyl chloride	ND	25	ug/kg	
m-Xylene & p-Xylene	ND	12	ug/kg	
o-Xylene	ND	12	ug/kg	
				•
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS	_	
Dibromofluoromethane	105 -	(80 - 120)	)	
1,2-Dichloroethane-d4	112	(79 - 125)	)	
4-Bromofluorobenzene	100	(71 - 132)	)	
Toluene-d8	102	(77 - 117)		

#### Client Sample ID: B-45-15

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-020 Work Order #...: ENRE01AA Matrix..... WATER

 Date Sampled...:
 11/08/01 09:15
 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1325351
 Analysis Time...:
 14:37

Dilution Factor: 13.33

Method.....: SW846 8260B

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	13	ug/L
Bromobenzene	ND	13	ug/L '
Bromochloromethane	ND	13	ug/L
Bromodichloromethane	ND	13	ug/L
Bromoform	ND	13	ug/L
Bromomethane	ND	27	ug/L
n-Butylbenzene	ND	13	ug/L
sec-Butylbenzene	ND	13	ug/L
tert-Butylbenzene	ND .	13	ug/L
Carbon tetrachloride	ND	13	ug/L
Chlorobenzene	ND	13	ug/L
Chlorodibromomethane	ND	13	ug/L
Chloroethane	ND	27	ug/L
Chloroform	ND	13	ug/L
Chloromethane	ND	27	ug/L
2-Chlorotoluene	ND	13	ug/L
4-Chlorotoluene	ND	13	ug/L
Dibromomethane	ND	13	ug/L
1,2-Dichlorobenzene	ND	13	ug/L
1,3-Dichlorobenzene	ND .	13	ug/L
1,4-Dichlorobenzene	ND	13	ug/L
Dichlorodifluoromethane	ND	27	ug/L
1,1-Dichloroethane	ND	13	ug/L
1,2-Dichloroethane	ND	13	ug/L
1,1-Dichloroethene	ND	13	ug/L
cis-1,2-Dichloroethene	ND	13	ug/L
trans-1,2-Dichloroethene	ND	6.7	ug/L
1,2-Dichloropropane	ND	13	ug/L
1,3-Dichloropropane	ND	13	ug/L
2,2-Dichloropropane	ND	67	ug/L
1,1-Dichloropropene	ND	13	ug/L
Ethylbenzene	ND	13	ug/L
Trichlorofluoromethane	ND	27	ug/L
Hexachlorobutadiene	ND	13	ug/L
Isopropylbenzene	ND	13	ug/L
p-Isopropyltoluene	ND	13	ug/L .
Methylene chloride	ND	13	ug/L
Naphthalene	ND	13	ug/L

# Client Sample ID: B-45-15

# GC/MS Volatiles

Lot-Sample #: D1K120155-020	Work Order #: ENRE01AA	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	13	ug/L
Styrene	ND	13	ug/L
1,1,1,2-Tetrachloroethane	ND	13	ug/L
1,1,2,2-Tetrachloroethane	ND	1.3	ug/L
Tetrachloroethene	300	1.3	ug/L
Toluene	ND	13	ug/L
1,2,3-Trichlorobenzene	ND	13	ug/L
1,2,4-Trichloro- benzene	ND	13	ug/L
1,1,1-Trichloroethane	47	13	ug/L
1,1,2-Trichloroethane	ND	13	ug/L
Trichloroethene	20	13	ug/L
1,2,3-Trichloropropane	ND	13	ug/L
1,2,4-Trimethylbenzene	ND	13	ug/L
1,3,5-Trimethylbenzene	ND	13	ug/L
Vinyl chloride	ND	13	ug/L
o-Xylene	ND	13	ug/L
m-Xylene & p-Xylene	ND	27	ug/L
1,2-Dibromo-3-	ND	27 .	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	13	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	<u>LIMITS</u>	_
Dibromofluoromethane	115	(80 - 120)	-
1,2-Dichloroethane-d4	122	(72 - 127)	
4-Bromofluorobenzene	91	(79 - 119)	
Toluene-d8	94	(79 - 119)	

## Client Sample ID: B-46-2

#### GC/MS Volatiles

Lot-Sample #...: D1K120155-021 Work Order #...: ENRE11AA Matrix.....: SOLID

 Date Sampled...:
 11/08/01 09:35
 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1330178
 Analysis Time...:
 15:15

Dilution Factor: 4.75

*** Moisture....:** 16 **Method.....:** SW846 8260B

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	1200	ug/kg
Bromobenzene	ND	1200	ug/kg '
Bromochloromethane	ND	1200	ug/kg
Bromodichloromethane	ND	1200	ug/kg
Bromoform	ND	1200	ug/kg
Bromomethane	· ND	2400	ug/kg
n-Butylbenzene	ND	1200	ug/kg
sec-Butylbenzene	ND	1200	ug/kg
tert-Butylbenzene	ND	1200	ug/kg
Carbon tetrachloride	ND	1200	ug/kg
Chlorobenzene	ND	1200	`ug/kg
Chlorodibromomethane	ND	1200	ug/kg
Chloroethane	ND	2400	ug/kg
Chloroform	ND	2400	ug/kg
Chloromethane	ND	2400	ug/kg
2-Chlorotoluene	ND	1200	ug/kg
4-Chlorotoluene	ND	1200	ug/kg
1,2-Dibromo-3-	ND	2400	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND .	1200	ug/kg
Dibromomethane	Ν̈́D	1200	ug/kg
1,2-Dichlorobenzene	ND	1200	ug/kg
1,3-Dichlorobenzene	ND	1200	ug/kg
1,4-Dichlorobenzene	ND	1200	ug/kg
Dichlorodifluoromethane	ND	2400	ug/kg
1,1-Dichloroethane .	ND	1200	ug/kg
1,2-Dichloroethane	ND	1200	ug/kg
cis-1,2-Dichloroethene	ND	590	ug/kg
trans-1,2-Dichloroethene	ND	590	ug/kg
1,1-Dichloroethene	ND	1200	ug/kg
1,2-Dichloropropane	ND	1200	ug/kg
1,3-Dichloropropane	ND	1200	ug/kg
2,2-Dichloropropane	ND	1200	ug/kg
1,1-Dichloropropene	ND	1200	ug/kg
Ethylbenzene	ND	1200	ug/kg
Hexachlorobutadiene	ND	1200	ug/kg
Isopropylbenzene	ND	1200	ug/kg
p-Isopropyltoluene	ND	1200	ug/kg

(Continued on next page)

## Client Sample ID: B-46-2

## GC/MS Volatiles

Lot-Sample #: D1K120155-021	Work Order #:	ENRE11AA	Matrix: SOLID
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	1200	ug/kg
Naphthalene	ND	1200	ug/kg
n-Propylbenzene	ND	1200	ug/kg
Styrene	ND	1200	ug/kg
1,1,1,2-Tetrachloroethane	ND	1200	ug/kg
1,1,2,2-Tetrachloroethane	ND	1200	ug/kg
Tetrachloroethene `	28000	1200	ug/kg
Toluene	ND	1200	ug/kg
1,2,3-Trichlorobenzene	ND	1200	ug/kg
1,2,4-Trichloro-	ND	1200	ug/kg
benzene		•	
1,1,1-Trichloroethane	ND	1200	ug/kg
1,1,2-Trichloroethane	ND	1200	ug/kg
Trichloroethene	ND	1200	ug/kg
Trichlorofluoromethane	ND	2400	ug/kg
1,2,3-Trichloropropane	ND	1200	ug/kg
1,2,4-Trimethylbenzene	ND	1200	ug/kg
1,3,5-Trimethylbenzene	ND	1200	ug/kg
Vinyl chloride	ND	1200	ug/kg
m-Xylene & p-Xylene	ND	590	ug/kg
o-Xylene	ND	590	ug/kg
·	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	91 .	(72 - 121)	
1,2-Dichloroethane-d4	87	(53 - 131)	

99

95

4-Bromofluorobenzene

Toluene-d8

(71 - 127)

(57 - 130)

## Client Sample ID: B-46-13

## GC/MS Volatiles

Lot-Sample #...: D1K120155-022 Work Order #...: ENRE21AA Matrix...... SOLID

 Date Sampled...:
 11/08/01 09:50 Date Received..:
 11/10/01

 Prep Date....:
 11/19/01 Analysis Date..:
 11/19/01

 Prep Batch #...:
 1324469 Analysis Time..:
 20:44

Dilution Factor: 5

**% Moisture....:** 16 **Method.....:** SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	25	ug/kg
Bromobenzene .	ND	25	ug/kg
Bromochloromethane	ND ·	25	ug/kg
Bromodichloromethane	ND	25	ug/kg
Bromoform	ND ·	25	ug/kg
Bromomethane	ND	50	ug/kg
n-Butylbenzene	ND	25	ug/kg
sec-Butylbenzene	ND	25	ug/kg
tert-Butylbenzene	ND	25	ug/kg
Carbon tetrachloride	ND	25	ug/kg
Chlorobenzene	ND	25	ug/kg
Chlorodibromomethane	ND	25	ug/kg
Chloroethane	ND	50	ug/kg
Chloroform	ND	50	ug/kg
Chloromethane	ND	50	ug/kg
2-Chlorotoluene	ND	25 .	ug/kg
4-Chlorotoluene	ND	25	ug/kg
1,2-Dibromo-3-	ND	50	ug/kg
chloropropane (DBCP)		à	
1,2-Dibromoethane (EDB)	ND	25	ug/kg
Dibromomethane	ND	25	ug/kg
1,2-Dichlorobenzene	ND	25 .	ug/kg
1,3-Dichlorobenzene	ND	25	ug/kg
1,4-Dichlorobenzene	ND	25	ug/kg
Dichlorodifluoromethane	NĎ	50	ug/kg
1,1-Dichloroethane	ND ,	25	ug/kg
1,2-Dichloroethane	ND	25	ug/kg
cis-1,2-Dichloroethene .	ND	12	ug/kg
trans-1,2-Dichloroethene	ND	12	ug/kg
1,1-Dichloroethene	ND	25	ug/kg
1,2-Dichloropropane	ND	25	ug/kg
1,3-Dichloropropane	ND .	25	ug/kg
2,2-Dichloropropane	ND	25	ug/kg
1,1-Dichloropropene	ND	25	ug/kg
Ethylbenzene	ND '	25	ug/kg
Hexachlorobutadiene	ND	25	ug/kg
Isopropylbenzene	ND	25	ug/kg
p-Isopropyltoluene	ND	25	ug/kg

(Continued on next page)

# Client Sample ID: B-46-13

## GC/MS Volatiles

TOC-Dample #	DIRIZ0133-022	HOLK OLDER	# ENREZIAA	Maclix	SOUTH
•					

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	25	ug/kg
Naphthalene	ND	25	ug/kg
n-Propylbenzene	ND	25	ug/kg
Styrene	ND	25	ug/kg
1,1,1,2-Tetrachloroethane	ND	25	ug/kg
1,1,2,2-Tetrachloroethane	ND	25	ug/kg
Tetrachloroethene	690	25	ug/kg
Toluene	ND	25	ug/kg
1,2,3-Trichlorobenzene	ND	25	ug/kg
1,2,4-Trichloro-	ND	25	ug/kg
benzene			
1,1,1-Trichloroethane	ND	25	ug/kg
1,1,2-Trichloroethane	ND	25	ug/kg
Trichloroethene	ND	25	ug/kg
Trichlorofluoromethane	ND	50	ug/kg
1,2,3-Trichloropropane	ND	25	ug/kg
1,2,4-Trimethylbenzene	ND	25	ug/kg
1,3,5-Trimethylbenzene	ND	25	ug/kg
Vinyl chloride	ND	25	ug/kg
m-Xylene & p-Xylene	ND	12	ug/kg
o-Xylene	ND	12	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	103	(80 - 120)	
1,2-Dichloroethane-d4	106	(79 - 125)	
4-Bromofluorobenzene	104	(71 - 132)	
Toluene-d8	101	(77 - 117)	

## Client Sample ID: B-46-17

## GC/MS Volatiles

Lot-Sample #...: D1K120155-023 Work Order #...: ENRE41AA Matrix..... WATER

 Date Sampled...:
 11/08/01 10:00 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1325351 Analysis Time...:
 15:01

Dilution Factor: 40

Method.....: SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	40	ug/L
Bromobenzene	ND	40	ug/L
Bromochloromethane	ND	40	ug/L
Bromodichloromethane	ND	40	ug/L
Bromoform	ND	40	ug/L
Bromomethane	ND	80	ug/L
n-Butylbenzene	ND	40	ug/L
sec-Butylbenzene	ND	40	ug/L
tert-Butylbenzene	ND	40	ug/L
Carbon tetrachloride	ND	40	ug/L
Chlorobenzene	ND	40	ug/L
Chlorodibromomethane	ND	40 .	ug/L
Chloroethane	ND	80	ug/L
Chloroform	ND	40	ug/L
Chloromethane	ND	80	ug/L
2-Chlorotoluene	ND	40	ug/L
4-Chlorotoluene	ND	40	ug/L
Dibromomethane	ND	40	ug/L
1,2-Dichlorobenzene	ND	40	ug/L
1,3-Dichlorobenzene	ND	40	ug/L
1,4-Dichlorobenzene	ND	40	ug/L
Dichlorodifluoromethane	ND	80	ug/L
1,1-Dichloroethane	ND	40	ug/L
1,2-Dichloroethane	- ND	40	ug/L
1,1-Dichloroethene	ND	40	ug/L
cis-1,2-Dichloroethene	ND	40	ug/L
trans-1,2-Dichloroethene	ND	20	ug/L
1,2-Dichloropropane	ND	40	ug/L
1,3-Dichloropropane	ND	40	ug/L
2,2-Dichloropropane	ND	200	ug/L
1,1-Dichloropropene	ND	40	ug/L
Ethylbenzene	ND	40 .	ug/L
Trichlorofluoromethane	ND	80	ug/L
Hexachlorobutadiene	ND	40	ug/L
Isopropylbenzene	ND	40	ug/L
p-Isopropyltoluene	ND	40	ug/L
Methylene chloride	ND	40	ug/L
Naphthalene	ND	40	ug/L

(Continued on next page)

# Client Sample ID: B-46-17

# GC/MS Volatiles

	•	REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	40	ug/L
Styrene	ND	40	ug/L
1,1,1,2-Tetrachloroethane	ND	40	ug/L
1,1,2,2-Tetrachloroethane	ND	40	ug/L
Tetrachloroethene	1300	40	ug/L
Toluene	ND	40	ug/L
1,2,3-Trichlorobenzene	ND .	40	ug/L
1,2,4-Trichloro-	ND	40	ug/L
benzene			
1,1,1-Trichloroethane	ND	40	ug/L
1,1,2-Trichloroethane	ND	40	ug/L
Trichloroethene	40	40	ug/L
1,2,3-Trichloropropane	ND	40	ug/L
1,2,4-Trimethylbenzene	ND	40	ug/L
1,3,5-Trimethylbenzene	ND	40 .	ug/L
Vinyl chloride	ND .	40	ug/L
o-Xylene	ND	40	ug/L
m-Xylene & p-Xylene	ND ,	80	ug/L
1,2-Dibromo-3-	ND	80	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	40	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	114	(80 - 120)	
1,2-Dichloroethane-d4	121	(72 - 127)	
4-Bromofluorobenzene	91	(79 - 119)	
Toluene-d8	93	(79 - 119)	

## Client Sample ID: B-49-4

## GC/MS Semivolatiles

Lot-Sample #...: D1K120155-016 Work Order #...: ENRD81AA Matrix.....: SOLID

Date Sampled...: 11/08/01 08:25 Date Received..: 11/10/01 Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Prep Batch #...: 1325202 Analysis Time..: 19:59

Dilution Factor: 1

**% Moisture....:** 17 Method.....: SW846 8270C

		REPORTIN	'G		
PARAMETER	RESULT	LIMIT	UNITS	MDL	
Acenaphthene	ND	330	ug/kg	46	
Acenaphthylene	ND	330	ug/kg	34	
Anthracene	ND	330	ug/kg	78	
Benzo(a)anthracene	ND	330	ug/kg	39	
Benzo(b) fluoranthene	ND	330	ug/kg	100	
Benzo(k) fluoranthene	ND	330	ug/kg	93	
Benzo(ghi)perylene	ND	330	ug/kg	70	
Benzo(a)pyrene	ND	330	ug/kg	94	
Chrysene	ND	330	ug/kg	53	
Dibenz(a,h)anthracene	ND	330	ug/kg	47	
Fluoranthene	ND	330	ug/kg	84	
Fluorene	ND	330	ug/kg	76	
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	48	
Naphthalene	ND	330	ug/kg	70	
Phenanthrene	ND	330	ug/kg	37	
Pyrene	ND	330	ug/kg	40	
<pre>bis(2-Ethylhexyl)    phthalate</pre>	ND	330	ug/kg	69 ·	
Dimethyl phthalate	ND	330	ug/kg	85	
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
2-Fluorophenol	75	(34 - 97	)		
Phenol-d5	70	(39 - 90	)		
Nitrobenzene-d5	75	(33 - 97	)		
2-Fluorobiphenyl	72	(39 - 91	)		
2,4,6-Tribromophenol	61	(29 - 95	)		
Terphenyl-d14	79	(30 - 10	2)		

# Client Sample ID: B-49-15

# GC/MS Semivolatiles

Lot-Sample #:	D1K120155-017	Work Order #:	ENREHLAA	Matrix 9	SOLID
Date Sampled:	11/08/01 08:35	Date Received:			
Prep Date:	11/21/01	Analysis Date:	11/25/01		
Prep Batch #:	1325202	Analysis Time:	20:22		
Dilution Factor:	1				
<pre>% Moisture:</pre>	15	Method:	SW846 8270C		

		REPORTIN	ig ·		
PARAMETER	RESULT	LIMIT	UNITS	MDL	
Acenaphthene	ND	330	ug/kg	46	
Acenaphthylene	ND	330	ug/kg	34	
Anthracene	ND	330	ug/kg	78	
Benzo(a) anthracene	ND	330	ug/kg	39	
Benzo(b)fluoranthene	ND ,	330.	ug/kg	100	
Benzo(k) fluoranthene	ND	330	ug/kg	93	
Benzo(ghi)perylene	ND	330	ug/kg	70	
Benzo(a)pyrene	ND .	330	ug/kg	94	
Chrysene	ND	330	ug/kg	53	
Dibenz(a,h)anthracene	ND	330	ug/kg	47	
Fluoranthene	ND	330 .	ug/kg	84	
Fluorene	ND	330	ug/kg	76	
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	48	
Naphthalene	ND	330	ug/kg	70	
Phenanthrene	ND	330	ug/kg	37	
Pyrene	ND	330	ug/kg	40	
bis(2-Ethylhexyl)	ND	330	ug/kg	69	
phthalate	•	•			
Dimethyl phthalate	ND	330	ug/kg	85	
CITALOGAMA	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS	<del></del>	•	
2-Fluorophenol Phenol-d5	68	(34 - 97	•		
<del></del>	65	(39 - 90	•		
Nitrobenzene-d5	69	(33 - 97			
2-Fluorobiphenyl	66	(39 - 91			
2,4,6-Tribromophenol	56	(29 - 95	•		
Terphenyl-d14	70	(30 - 102)	2)		.*

# Client Sample ID: B-70-18

## TOTAL Metals

Lot-Sample #...: D1K120155-001 Matrix....: SOLID

Date Sampled...: 11/07/01 11:45 Date Received..: 11/10/01

**% Moisture....:** 3.5

		REPORTI	NG	•	PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	: 1317288					
Mercury	ND	0.033	mg/kg	SW846 7471A	11/19/01	ENQ6W1AF
		Dilution Fa	ctor: 1	Analysis Time: 23:05	i	
Prep Batch #	: 1319444					
Silver .	ND	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENQ6W1AE
		Dilution Fac	ctor: 1	Analysis Time: 18:31		
Arsenic	ND	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENQ6W1AF
		Dilution Fac	ctor: 1	Analysis Time: 18:31		
Barium	16.6	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENQ6W1AC
		Dilution Fac	ctor: 1	Analysis Time: 18:31		
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/15-11/18/01	ENQ6W1AG
		Dilution Fac	ctor: 1	Analysis Time: 18:31		
Chromium	1.4	1.0	mg/kg	SW846 6010B	11/15-11/18/01	ENQ6W1AD
		Dilution Fac	ctor: 1	Analysis Time: 18:31		
Lead	1.5	0.80	mq/kq	SW846 6010B	11/15-11/18/01	ENO6W1AH
		Dilution Fac	ctor: 1	Analysis Time: 18:31		
Selenium	ND	1.3	mg/kg	SW846 6010B	11/15-11/18/01	ENO6W1AJ
	•	Dilution Fac		Analysis Time: 18:31	, ,,,-	

# QC DATA ASSOCIATION SUMMARY

## D1K120155

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	•
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
0.01	GOT TO				
001	SOLID	SW846 7471A		1317288	1317162
	SOLID	SW846 8260B		1323350	1323178
	SOLID	SW846 6010B		1319444	1319214
	SOLID	MCAWW 160.3 MOD		1331243	1331104
002	SOLID	SW846 8260B .		1324469	1324228
	SOLID	MCAWW 160.3 MOD		1331243	1331104
003	SOLID	SW846 8260B		1220170	1770000
003	SOLID	MCAWW 160.3 MOD		1330178	1330060
	POLITO	MCAWW 180.3 MOD		1331243	1331104
004	SOLID	SW846 8260B		1324469	1324228
	SOLID	MCAWW 160.3 MOD	·	1331243	1331104
005	SOLID	SW846 8260B		1324469	1324228
	SOLID	MCAWW 160.3 MOD		1331246	1331106
,		20010 1.02		1331240	1331100
006	SOLID	SW846 8260B		1324469	1324228
	SOLID	MCAWW 160.3 MOD	,	1331246	1331106
007	SOLID	SW846 8260B		1323350	1323178
•	SOLID	MCAWW 160.3 MOD		1331246	1331106
008	SOLID	SW846 8260B		1323350	1323178
	SOLID	MCAWW 160.3 MOD		1331246	1331106
				•	
009	SOLID	SW846 8260B		1323329	1323164
	SOLID	MCAWW 160.3 MOD		1331246	1331106
010	SOLID	SW846 8260B		1324469	1324228
	SOLID	MCAWW 160.3 MOD		1331246	1331106
				( 2332210	
011	SOLID	SW846 8260B		1324469	1324228
	SOLID	MCAWW 160.3 MOD		1331246	1331106
012	SOLID	SW846 8260B		1324469	1324228
~~~	SOLID	MCAWW 160.3 MOD	•	1331246	
	20111	MODINE TOOLS NOD		1331240	1331106
013	SOLID	SW846 8260B		1323350	1323178
	SOLID	MCAWW 160.3 MOD		1331246	1331106
•					
014	SOLID	SW846 8260B		1323350	1323178
	SOLID	MCAWW 160.3 MOD		1331246	1331106

QC DATA ASSOCIATION SUMMARY

D1K120155

Sample Preparation and Analysis Control Numbers

•		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
015	SOLID	SW846 8260B		1324469	1324228
	SOLID	MCAWW 160.3 MOD		1331246	1331106
016	SOLID	SW846 8270C .	•	1325202	1325071
	SOLID	MCAWW 160.3 MOD		1331246	1331106
017	SOLID	SW846 8270C		1325202	1325071
•	SOLID	MCAWW 160.3 MOD		1331246	1331106
018	SOLID	SW846 8260B		1324469	1324228
	SOLID	MCAWW 160.3 MOD		1331246	1331106
019	SOLID	SW846 8260B		1324469	1324228
	SOLID	MCAWW 160.3 MOD		1331246	1331106
020	WATER	SW846 8260B		1325351	1325183
021	SOLID	SW846 8260B		1330178	1330060
	SOLID	MCAWW 160.3 MOD		1331246	1331106
022	SOLID	SW846 8260B		1324469	1324228
•	SOLID	MCAWW 160.3 MOD		1331246	1331106
023	WATER	SW846 8260B		1325351	1325183

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EN8WP1AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K190000-350 EN8WP1AD-LCSD

 Prep Date....:
 11/17/01
 Analysis Date..:
 11/17/01

 Prep Batch #...:
 1323350
 Analysis Time..:
 08:31

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	100	(78 - 118)		SW846 8260B
	96	(78 - 118)	4.2 (0-25)	SW846 8260B
Benzene	95	(79 - 121)	•	SW846 8260B
	92	(79 - 121)	3.6 (0-25)	SW846 8260B
Chlorobenzene	94	(76 - 116)		SW846 8260B
	89	(76 - 116)	5.5 (0-25)	SW846 8260B
Toluene	95	(76 - 116)		SW846 8260B
	89	(76 - 116)	6.5 (0-25)	SW846 8260B
Trichloroethene	. 99	(83 - 123)		SW846 8260B
	94	(83 - 123)	5.3 (0-25)	SW846 8260B
		PERCENT	RECOVERY	

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	112	(80 - 120)
	107	(80 - 120)
1,2-Dichloroethane-d4	. 115	(79 - 125)
	116	(79 - 125)
4-Bromofluorobenzene	99	(71 - 132)
	100	(71 - 132)
Toluene-d8	99	(77 - 117)
	96	(77 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120155

Work Order #...: EN8WP1AC-LCS

LCS Lot-Sample#: D1K190000-350

EN8WP1AD-LCSD

Matrix....: SOLID

Prep Date....: 11/17/01

Analysis Date..: 11/17/01

Prep Batch #...: 1323350

Analysis Time..: 08:31

Dilution Factor: 1

	SPIKE	MEASURED		PERCENT		
PARAMETER	AMOUNT	TRUOMA	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	50.0	49.9	ug/kg	100		SW846 8260B
	50.0	47.9	ug/kg	96	4.2	SW846 8260B
Benzene	50.0	47.7	ug/kg	95		SW846 8260B
	50.0	46.0	ug/kg	92	3.6	SW846 8260B
Chlorobenzene	50.0	47.0	ug/kg	94		SW846 8260B
	50.0	44.5	ug/kg	89	5.5	SW846 8260B
Toluene .	50.0	47.6	ug/kg	95		SW846 8260B
_	50.0	44.6	ug/kg	89	6.5	SW846 8260B
Trichloroethene	50.0	49.5	ug/kg	99		SW846 8260B
	50.0	47.0	ug/kg	94	5.3	SW846 8260B
			PERCENT	RECOVERY		
SURROGATE			RECOVERY	LIMITS		
Dibromofluoromethane			112	(80 - 120	<u> </u>	
			107	(80 - 120		
1,2-Dichloroethane-d4			115	(79 - 125	•	
_,			116	(79 - 125	-	
4-Bromofluorobenzene			99	(71 - 132		
			100	(71 - 132)	-	•
Toluene-d8		,		•	-	
TOTUETTE-GO			99	(77 - 117	•	
•			96 '	(77 - 117)	,

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EPCGT1AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K200000-469 EPCGT1AD-LCSD

Prep Date....: 11/19/01 Analysis Date..: 11/19/01
Prep Batch #...: 1324469 Analysis Time..: 13:42

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	97	(78 - 118)		SW846 8260B
	99	(78 - 118)	2.6 (0-25)	SW846 8260B
Benzene	93	(79 - 121)		SW846 8260B
·	94	(79 - 121)	0.84 (0-25)	SW846 8260B
Chlorobenzene	89	(76 - 116)		SW846 8260B
	91	(76 - 116)	1.5 (0-25)	SW846 8260B
Toluene	90	(76 - 116)		SW846 8260B
	91	(76 - 116)	0.58 (0-25)	SW846 8260B
Trichloroethene	• 97	(83 - 123)		SW846 8260B
	93	(83 - 123)	4.4 (0-25)	SW846 8260B
		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane	v	98	(80 - 120)	
•		100	(80 - 120)	
1,2-Dichloroethane-d4		100	(79 - 125)	
		101	(79 - 125)	
4-Bromofluorobenzene		100	(71 - 132)	
	•	103	(71 - 132)	
Toluene-d8		100	(77 - 117)	

100

(77 - 117)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EPCGT1AC-LCS Matrix..... SOLID

LCS Lot-Sample#: D1K200000-469 EPCGT1AD-LCSD

Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Analysis Time..: 13:42

Prep Batch #...: 1324469

Dilution Factor: 1

•	SPIKE	MEASURED)	PERCENT		
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	50.0	48.3	ug/kg	97		SW846 8260B
	50.0	49.6	ug/kg	99	2.6	SW846 8260B
Benzene	50.0	46.7	ug/kg	93		SW846 8260B
	50.0	47.1	ug/kg	94	0.84	SW846 8260B
Chlorobenzene	50.0	44.6	ug/kg	89		SW846 8260B
	50.0	45.3	ug/kg	91	1.5	SW846 8260B
Toluene	50.0	45.0	ug/kg	90		SW846 8260B
	50.0	45.3	ug/kg	91	0.58	SW846 8260B
Trichloroethene	50.0	48.6	ug/kg	97		SW846 8260B
	50.0	46.5	ug/kg	93	4.4	SW846 8260B
		ž. h.	PERCENT	RECOVERY		
SURROGATE			RECOVERY	LIMITS		
Dibromofluoromethane		•	98	(80 - 120)	
			100	(80 - 120)	
1,2-Dichloroethane-d4			100	(79 - 125)	•
			101	(79 - 125)	
4-Bromofluorobenzene	-		100	(71 - 132)	,
		•	103	(71 - 132)	
Toluene-d8	•		100	(77 - 117) ·	
			100	(77 - 117)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EPGA41AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K260000-178

EPGA41AD-LCSD

Prep Date....: 11/19/01

Analysis Date..: 11/20/01

Prep Batch #...: 1330178

Analysis Time..: 11:32

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	82	(54 - 129)		SW846 8260B
	88	(54 - 129)	6.0 (0-30)	SW846 8260B
Benzene	96	(73 - 119)		SW846 8260B
	94	(73 - 119)	2.1 (0-30)	SW846 8260B
Chlorobenzene	96	(70 - 120)		SW846 8260B
	97	(70 - 120)	1.1 (0-30)	SW846 8260B
Trichloroethene	97	(76 - 118)		SW846 8260B
	98	(76 - 118)	1.5 (0-30)	SW846 8260B
Toluene	93 .	(71 - 119)		SW846 8260B
	93	(71 - 119)	0.090 (0-30)	SW846 8260B
		PERCENT	RECOVERY	
SURROGATE		PERCENT RECOVERY	RECOVERY LIMITS	
SURROGATE Dibromofluoromethane				
		RECOVERY	LIMITS	
		RECOVERY 105	LIMITS (72 - 121)	
Dibromofluoromethane		RECOVERY 105 102	LIMITS (72 - 121) (72 - 121)	
Dibromofluoromethane		RECOVERY 105 102 105	LIMITS (72 - 121) (72 - 121) (53 - 131)	
Dibromofluoromethane 1,2-Dichloroethane-d4		RECOVERY 105 102 105 98	LIMITS (72 - 121) (72 - 121) (53 - 131) (53 - 131)	
Dibromofluoromethane 1,2-Dichloroethane-d4		RECOVERY 105 102 105 98 107	LIMITS (72 - 121) (72 - 121) (53 - 131) (53 - 131) (71 - 127)	
Dibromofluoromethane 1,2-Dichloroethane-d4 4-Bromofluorobenzene		RECOVERY 105 102 105 98 107 107	LIMITS (72 - 121) (72 - 121) (53 - 131) (53 - 131) (71 - 127) (71 - 127)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EPGA41AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K260000-178

EPGA41AD-LCSD

Prep Date....: 11/19/01

Analysis Date..: 11/20/01

Prep Batch #...: 1330178

Analysis Time..: 11:32

Dilution Factor: 1

	SPIKE	MEASUREI		PERCENT			
PARAMETER	TRUOMA	AMOUNT	UNITS	RECOVERY	RPD	METHO	D
1,1-Dichloroethene	2000	1650	ug/kg	82		SW846	8260B
	2000	1750	ug/kg	88	6.0	SW846	8260B
Benzene	2000	1920	ug/kg	96		SW846	8260B
•	2000	1880	ug/kg	94	2.1	SW846	8260B
Chlorobenzene	2000	1920	ug/kg	96		SW846	8260B
	2000	1950	ug/kg	97	1.1	SW846	8260B
Trichloroethene	2000	1930	ug/kg	97		SW846	8260B
·	2000	1960	ug/kg	98	1.5	SW846	8260B
Toluene	2000	1860	ug/kg	93		SW846	8260B
	2000	1860	ug/kg	93	0.090	SW846	8260B
•			PERCENT	RECOVERY			
SURROGATE			RECOVERY	LIMITS			
Dibromofluoromethane	~		105	(72 - 121) .		
			102	(72 - 121)		
1,2-Dichloroethane-d4			105	(53 - 131)		
			98	(53 - 131)		
4-Bromofluorobenzene			107	(71 - 127)	•	
			107	(71 - 127)		
Toluene-d8			97	(57 - 130)		
			98	(57 - 130)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EN8R51AC-LCS Matrix...: SOLID

LCS Lot-Sample#: D1K190000-329. EN8R51AD-LCSD

Prep Date....: 11/17/01 Analysis Date..: 11/17/01 Prep Batch #...: 1323329 Analysis Time..: 12:00

Dilution Factor: 1

i.				
	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	87	(54 - 129)		SW846 8260B
	87	(54 - 129)	0.70 (0-30)	SW846 8260B
Benzene	94	(73 - 119)	¥	SW846 8260B
	93	(73 - 119)	0.86 (0-30)	SW846 8260B
Chlorobenzene	94	(70 - 120)		SW846 8260B
	97	(70 - 120)	3.0 (0-30)	SW846 8260B
Trichloroethene	98	(76 - 118)		SW846 8260B
	91	(76 - 118)	8.1 (0-30)	SW846 8260B
Toluene	87	(71 - 119)		SW846 8260B
*.	94	(71 - 119)	7.3 (0-30)	SW846 8260B
		PERCENT	RECOVERY	•
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane		100	(72 - 121)	
		97	(72 - 121)	
1,2-Dichloroethane-d4		99	(53 - 131)	
		96	(53 - 131)	•
4-Bromofluorobenzene		104	(71 - 127)	
		105	(71 - 127)	
Toluene-d8		100	(57 - 130)	•
		103	(57 - 130)	
·			· •	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EN8R51AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K190000-329 EN8R51AD-LCSD

 Prep Date....:
 11/17/01
 Analysis Date..:
 11/17/01

 Prep Batch #...:
 1323329
 Analysis Time..:
 12:00

Dilution Factor: 1

	SPIKE	MEASUREI	,	PERCENT		
PARAMETER	TNUOMA	TRUOMA	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	2000	1730	ug/kg	87		SW846 8260B
	2000	1740	ug/kg	87	0.70	SW846 8260B
Benzene	2000	1880	ug/kg	94		SW846 8260B
	2000	1860	ug/kg	93	0.86	SW846 8260B
Chlorobenzene	2000	1880	ug/kg	94		SW846 8260B
	2000	1940	ug/kg	97	3.0	SW846 8260B
Trichloroethene	2000	1960	ug/kg	98		SW846 8260B
	2000	1810	ug/kg	91	8.1	SW846 8260B
Toluene	2000	1740 ·	ug/kg	87		SW846 8260B
	2000	1870	ug/kg	94	7.3	SW846 8260B
			PERCENT	RECOVERY		
SURROGATE	-		RECOVERY	LIMITS	_	
Dibromofluoromethane			100	(72 - 121)	
		•	97	(72 - 121) .	
1,2-Dichloroethane-d4	•		99	(53 - 131)	
			96	(53 - 131)	
4-Bromofluorobenzene			104	(71 - 127)	
			105	(71 - 127)	
Toluene-d8			100	(57 - 130)	
			103	(57 - 130) .	
						•

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EPEJM1AC-LCS Matrix....: WATER

LCS Lot-Sample#: D1K210000-351 EPEJM1AD-LCSD

Prep Date....: 11/19/01 Analysis Date..: 11/19/01 Analysis Time..: 13:14

Prep Batch #...: 1325351

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	97	(79 - 119)		SW846 8260B
	93	(79 - 119)	3.9 (0-20)	SW846 8260B
Benzene	98	(79 - 119)		SW846 8260B
	94	(79 - 119)	4.0 (0-20)	SW846 8260B
Chlorobenzene	92	(76 - 116)		SW846 8260B
	90	(76 - 116)	2.4 (0-20)	SW846 8260B
Toluene	91	(75 - 122)		SW846 8260B
•	89	(75 - 122)	2.7 (0-20)	SW846 8260B
Trichloroethene	99	(81 - 121)		SW846 8260B
	95	(81 - 121)	3.3 (0-20)	SW846 8260B
•		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane		115	(80 - 120)	
		113	(80 - 120)	
1,2-Dichloroethane-d4		124	(72 - 127)	
		119	(72 - 127)	

90

89

93

91

(79 - 119)

(79 - 119)

(79 - 119)

(79 - 119)

NOTE (5):	TE(S):
-----------	--------

Toluene-d8

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

4-Bromofluorobenzene

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EPEJM1AC-LCS Matrix..... WATER

LCS Lot-Sample#: D1K210000-351

EPEJM1AD-LCSD

Prep Date....: 11/19/01

Analysis Date..: 11/19/01

Prep Batch #...: 1325351

Analysis Time..: 13:14

Dilution Factor: 1

	SPIKE	MEASURE	ס	PERCENT		
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	10.0	9.72	ug/L	97		SW846 8260B
	10.0	9.34	ug/L	93	3.9	SW846 8260B
Benzene	10.0	9.82	ug/L	98		SW846 8260B
	10.0	9.44	ug/L	94	4.0	SW846 8260B
Chlorobenzene	10.0	9.18	ug/L	92		SW846 8260B
•	10.0	8.97	ug/L	90	2.4	SW846 8260B
Toluene	10.0	9.11	ug/L	91		SW846 8260B
	10.0	8.87	ug/L	89	2.7	SW846 8260B
Trichloroethene	10.0	9.86	ug/L	99		SW846 8260B
	10.0	9.54	ug/L	95	3.3	SW846 8260B
			PERCENT	RECOVERY		
SURROGATE			RECOVERY	LIMITS		
Dibromofluoromethane	-		115	(80 - 120)	
		7.	113	(80 - 120		
1,2-Dichloroethane-d4			124	(72 - 127		
			119	(72 - 127		
4-Bromofluorobenzene			90	(79 - 119)	
		. •	89	(79 - 119)	• .
Toluene-d8			93	(79 - 119		
			91	(79 - 119)	
NOTE(S):		* .	art.			

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EN8WP1AA Matrix....: SOLID

MB Lot-Sample #: D1K190000-350

Prep Date....: 11/17/01 Prep Batch #...: 1323350

Analysis Time..: 09:25

Analysis Date..: 11/17/01

Dilution Factor: 1

		REPORTI	NG	•		
PARAMETER	RESULT	LIMIT	UNITS	METHOD		
Benzene	ND	5.0	ug/kg	SW846 8260B		
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B		
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B		
Bromoform	ND	5.0	ug/kg	SW846 8260B		
Bromomethane	ND	10	ug/kg	SW846 8260B		
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B		
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B		
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B		
Chloroethane	ND	10	ug/kg	SW846 8260B		
Chloroform	ND	10	ug/kg	SW846 8260B		
Chloromethane	ND	10	ug/kg	SW846 8260B		
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B		
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B		
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B		
Dichlorodifluoromethane	ND	. 10	ug/kg	SW846 8260B		
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B		
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B		
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B		
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B		
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B		
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B		
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B		
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B		
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B		
Methylene chloride	ND	5.0	ug/kg	SW846 8260B		
Styrene	ND	5.0	ug/kg	SW846 8260B		
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B		
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B		
Toluene	ND	5.0	ug/kg	SW846 8260B		
1,2,4-Trichloro- benzene	ND	5.0	ug/kg	SW846 8260B		
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B		
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B		
Trichloroethene	ND	5.0	ug/kg	SW846 8260B		
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B		
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B		
o-Xylene	ND	2.5	ug/kg	SW846 8260B		
n-Xylene & p-Xylene	ND	2.5	ug/kg	SW846 8260B		
1,2-Dibromo-3-	ND	10	ug/kg	SW846 8260B		
chloropropane (DBCP)			37 ***3	5.1010 0200B		
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846 8260B		

(Continued on next page)

GC/MS Volatiles

Client Lot #: D1K120155	Work Order	#: EN8WP1	AA	Matrix: SOLII)
	·	REPORTING			
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
Bromobenzene	ND	5.0	ug/kg	SW846 8260B	
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B	
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B	
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B	
Dibromomethane	ND	5.0	ug/kg	SW846 8260B	
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B	
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B	
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B	
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B	
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B	
Naphthalene	ND	5.0	ug/kg	SW846 8260B	
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B	
1,2,3-Trichlorobenzene	ND .	5.0	ug/kg	SW846 8260B	
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B	
	*				
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS	_		
Dibromofluoromethane	109	(80 - 120)		
1,2-Dichloroethane-d4	116	(79 - 125)		
4-Bromofluorobenzene	99	(71 - 132	.)		
Toluene-d8	93	(77 - 117)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Matrix....: SOLID

Analysis Time..: 14:36

Client Lot #...: D1K120155 Work Order #...: EPCGT1AA

MB Lot-Sample #: D1K200000-469

Prep Date....: 11/19/01

Analysis Date..: 11/19/01 Prep Batch #...: 1324469

Dilution Factor: 1

•		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	· ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Chloroform	ND .	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND .	2.5	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Naphthalene	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

(Continued on next page)

GC/MS Volatiles

	•	REPORTING				
PARAMETER	RESULT	LIMIT UNITS		METHOD		
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B		
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B		
Toluene	ND	5.0	ug/kg	SW846 8260B		
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B		
1,2,4-Trichloro-	ND	5.0	ug/kg	SW846 8260B		
benzene						
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B		
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B		
Trichloroethene	ND	5.0	ug/kg	SW846 8260B		
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B		
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B		
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B		
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B		
o-Xylene	ND	2.5	ug/kg	SW846 8260B		
m-Xylene & p-Xylene	ND	2.5	ug/kg	SW846 8260B .		
1,2-Dibromo-3- chloropropane (DBCP)	ND	10	ug/kg	SW846 8260B		
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846 8260B		
	PERCENT	RECOVER	·	•		
SURROGATE	RECOVERY	LIMITS		•		
Dibromofluoromethane	101	(80 - 12	20)			
1,2-Dichloroethane-d4	98	(79 - 12	25)	•		
4-Bromofluorobenzene	100	(71 - 1	32)			
Toluene-d8	99	(77 - 1	L7)			

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EPGA41AA

Matrix..... SOLID MB Lot-Sample #: D1K260000-178

Prep Date....: 11/19/01

Analysis Time..: 12:22 Prep Batch #...: 1330178 Analysis Date..: 11/20/01

Dilution Factor: 1

		REPORTI		
PARAMETER	RESULT	LIMIT_	<u>UNITS</u>	METHOD
Benzene	ND	250	ug/kg	SW846 8260B
Bromobenzene	ND .	250	ug/kg	SW846 8260B
Bromochloromethane	ND	250	ug/kg	SW846 8260B '
Bromodichloromethane	ND	250	ug/kg	SW846 8260B
Bromoform	ND	250	ug/kg	SW846 8260B
Bromomethane	ND	500	ug/kg	SW846 8260B
n-Butylbenzene	ND '	250	ug/kg	SW846 8260B
sec-Butylbenzene	ND	250	ug/kg	SW846 8260B
tert-Butylbenzene	ND .	250	ug/kg	SW846 8260B
Carbon tetrachloride	ND	250	ug/kg	SW846 8260B
Chlorobenzene	ND	250	ug/kg	SW846 8260B
Chlorodibromomethane	ND	250	ug/kg	SW846 8260B
Chloroethane	ND	500	ug/kg	SW846 8260B
Chloroform	ND	500	ug/kg	SW846 8260B
Chloromethane ,	ND	500	ug/kg	SW846 8260B
2-Chlorotoluene	ND	250	ug/kg	SW846 8260B
4-Chlorotoluene	ND	250	ug/kg	SW846 8260B
Dibromomethane	ND	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	500	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	120	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	120	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
l,3-Dichloropropane	ND	250	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
l,1-Dichloropropene	ND	250	ug/kg	SW846 8260B
Ethylbenzene	ND	250	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	500	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	250	ug/kg	SW846 8260B
Isopropylbenzene	ND	250	ug/kg	SW846 8260B
p-Isopropyltoluene .	ND	250	ug/kg	SW846 8260B
Methylene chloride	ND	250	ug/kg	SW846 8260B
Naphthalene	ND	250	ug/kg	SW846 8260B
n-Propylbenzene	ND	250	ug/kg	SW846 8260B
Styrene	ND	250	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B

(Continued on next page)

GC/MS Volatiles

		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
Tetrachloroethene	ND	250	ug/kg	SW846 8260B
Toluene	ND	250	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	250	ug/kg	SW846 8260B
1,2,4-Trichloro- benzene	ND	250	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	250	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND .	250	ug/kg	SW846 8260B
Trichloroethene	ND	250	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	250	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
Vinyl chloride	ND	250	ug/kg	SW846 8260B
o-Xylene	ND	120	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	120	ug/kg	SW846 8260B
1,2-Dibromo-3- chloropropane (DBCP)	ND	500	ug/kg	SW846 8260B
1,2-Dibromoethane (EDB)	ND	250	ug/kg	SW846 8260B
	PERCENT	RECOVERY	Z.	
SURROGATE	RECOVERY	LIMITS	<u> </u>	
Dibromofluoromethane	99	(72 - 12	21)	•
1,2-Dichloroethane-d4	99	(53 - 13	31)	
4-Bromofluorobenzene	102	(71 - 12	27)	
Foluene-d8	94	(57 - 13	30)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Matrix..... SOLID

Client Lot #...: D1K120155 Work Order #...: EN8R51AA

MB Lot-Sample #: D1K190000-329

Prep Date....: 11/17/01 Analysis Time..: 12:50

Analysis Date..: 11/17/01 Prep Batch #...: 1323329

Dilution Factor: 1

	•	REPORTI		
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Benzene	ND	250	ug/kg	SW846 8260B
Bromodichloromethane	ND	250	ug/kg	SW846 8260B
n-Butylbenzene	ND	250	ug/kg	SW846 8260B
sec-Butylbenzene	ND	250	ug/kg	SW846 8260B
Chlorobenzene	ND	250	ug/kg	SW846 8260B
Chlorodibromomethane	ND	250	ug/kg	SW846 8260B
Chloroethane	ND	500	ug/kg	SW846 8260B
Chloroform	ND	500	ug/kg	SW846 8260B
Chloromethane	ND .	500	ug/kg	SW846 8260B
Dibromomethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
Ethylbenzene	, ND	250	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	500	ug/kg	SW846 8260B
Isopropylbenzene	ND	250	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	250	ug/kg	SW846 8260B
Methylene chloride	ND	250	ug/kg	SW846 8260B
n-Propylbenzene	ND	250	ug/kg	SW846 8260B
Styrene	ND	250	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
Tetrachloroethene	ND	250	ug/kg	SW846 8260B
Toluene	ND	250	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	250	ug/kg	SW846 8260B
Trichloroethene	ND	250	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
Vinyl chloride	ND	250	ug/kg	SW846 8260B
1,2-Dibromoethane (EDB)	ND	250	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	120	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	250	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	250	ug/kg	SW846.8260B
Bromobenzene	ND	250	ug/kg	SW846 8260B
Bromochloromethane	ND	250	ug/kg	SW846 8260B
Bromoform	ND	250	ug/kg	SW846 8260B
Bromomethane	ND	500	ug/kg	SW846 8260B
tert-Butylbenzene	ND	250	ug/kg	SW846 8260B
Carbon tetrachloride	ND	250	ug/kg	SW846 8260B
2-Chlorotoluene	ND	250	ug/kg	SW846 8260B
•			_	

(Continued on next page)

GC/MS Volatiles

		REPORTI	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
4-Chlorotoluene	ND	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	500	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	120	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	250	ug/kg	SW846 8260B
Naphthalene	ND	250	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	250	ug/kg	SW846 8260B
1,2,4-Trichloro- benzene	ND	250	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	250	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	250	ug/kg	SW846 8260B
o-Xylene	ND	120	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	120	ug/kg	SW846 8260B
1,2-Dibromo-3- chloropropane (DBCP)	ND	500	ug/kg	SW846 8260B
	PERCENT	RECOVERY	7	
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	96	(72 - 12	21)	
1,2-Dichloroethane-d4	97	(53 - 13	31)	
4-Bromofluorobenzene	98	(71 - 12	27)	

(57 - 130)

Calculations are performed before rounding to avoid round-off errors in calculated results.

99

Toluene-d8

NOTE(S):

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: EPEJM1AA Matrix..... WATER

MB Lot-Sample #: D1K210000-351

Prep Date....: 11/19/01 Analysis Time..: 14:03

Analysis Date..: 11/19/01 Prep Batch #...: 1325351

Dilution Factor: 1

		REPORTI	NG			
PARAMETER	RESULT	LIMIT	UNITS	METHOD		
Benzene	ND	1.0	ug/L	SW846 8260B		
Bromobenzene	ND	1.0	ug/L	SW846 8260B		
Bromochloromethane	ND	1.0	ug/L	SW846 8260B		
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B		
Bromoform	ND	1.0	ug/L	SW846 8260B		
Bromomethane	ND	2.0	ug/L	SW846 8260B		
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B		
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B		
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B		
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B		
Chlorobenzene	ND	1.0	ug/L	SW846 8260B		
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B		
Chloroethane	ŇD	2.0	ug/L	SW846 8260B		
Chloroform	ND	1.0	ug/L	SW846 8260B		
Chloromethane	ND	2.0	ug/L	SW846 8260B		
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B		
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B		
Dibromomethane	ND	1.0	ug/L	SW846 8260B		
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B		
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B		
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B		
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B		
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B		
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B		
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B		
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B		
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B		
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B		
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B		
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B		
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B		
Ethylbenzene	ND	1:0	ug/L	SW846 8260B		
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B		
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B		
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B		
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B		
Methylene chloride	ND	1.0	ug/L	SW846 8260B		
Naphthalene	ND	1.0	ug/L	SW846 8260B		
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B		
Styrene	ND	1.0	ug/L	SW846 8260B		
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B		

(Continued on next page)

GC/MS Volatiles

Client Lot #: D1K120155	Work Order #: EPEJM1AA			Matrix WATER			
		REPORTING					
PARAMETER	RESULT	LIMIT	UNITS	METHOD			
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B			
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B			
Toluene	ND	1.0	ug/L	SW846 8260B			
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B			
1,2,4-Trichloro-	ND	1.0	ug/L	SW846 8260B			
benzene	٠.						
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B			
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B			
Trichloroethene	ND	1.0	ug/L	SW846 8260B			
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B			
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B			
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B			
Vinyl chloride	ND	1.0	ug/L	SW846 8260B			
o-Xylene	ND	1.0	ug/L	SW846 8260B			
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B			
1,2-Dibromo-3-	ND ·	2.0	ug/L	SW846 8260B			
chloropropane (DBCP)							
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B			
-	PERCENT	RECOVERY					
SURROGATE	RECOVERY	LIMITS	_				
Dibromofluoromethane	116	(80 - 120	•				
1,2-Dichloroethane-d4	120	(72 - 127	')				
4-Bromofluorobenzene	89	(79 - 119)				
Toluene-d8	93	(79 - 119)				

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: ENVMJ1AC-MS Matrix.....: SOLID

MS Lot-Sample #: D1K130214-011 ENVMJ1AD-MSD

 Date Sampled...:
 11/09/01 13:20
 Date Received...:
 11/13/01

 Prep Date.....:
 11/17/01
 Analysis Date...:
 11/17/01

 Prep Batch #...:
 1323350
 Analysis Time...:
 10:31

Dilution Factor: 1 % Moisture....: 0.0

	PERCENT RE			RPD			
PARAMETER	RECOVERY	LIMITS RPD		LIMITS	METHOD		
1,1-Dichloroethene	72 a	(78 - 118)			SW846 8260B		
	69 a	(78 - 118)	4.9	(0-25)	SW846 8260B		
Benzene	67 a	(79 - 121)			SW846 8260B		
	66 a	(79 - 121)	1.5	(0-25)	SW846 8260B		
Chlorobenzene	61 a	(76 - 116)			SW846 8260B		
	62 a	(76 - 116)	1.6	(0-25)	SW846 8260B		
Toluene	63 a	(76 - 116)			SW846 8260B		
•	62 a	(76 - 116)	0.51	(0-25)	SW846 8260B		
Trichloroethene	67 a	(83 - 123)			SW846 8260B		
	65 a	(83 - 123)	3.7	(0-25)	SW846 8260B		
		PERCENT		RECOVERY	•		
SURROGATE		RECOVERY		LIMITS			
Dibromofluoromethane	_	107		(80 - 120)		
		110		(80 - 120	•		
1,2-Dichloroethane-d4		121		(79 - 125)		
		124		(79 - 125)		
4-Bromofluorobenzene		101		(71 - 132)		
	S	100		(71 - 132)		
Toluene-d8		90		(77 - 117)		
		94		(77 - 117)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

PERCENT

Client Lot #...: D1K120155 Work Order #...: ENVMJ1AC-MS Matrix....: SOLID

MS Lot-Sample #: D1K130214-011 ENVMJ1AD-MSD

SAMPLE SPIKE MEASRD

Date Sampled...: 11/09/01 13:20 Date Received..: 11/13/01 Prep Date....: 11/17/01 Analysis Date..: 11/17/01 Prep Batch #...: 1323350 Analysis Time..: 10:31

Dilution Factor: 1 * Moisture....: 0.0

MOUN	T AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO)
ND	50.0	36.1	ug/kg	72 a		SW846	8260B
ND	50.0	34.4	ug/kg	69 a	4.9	SW846	8260B
ND	50.0	33.5		67 a		SW846	8260B
ND	50.0	33.0		66 a	1.5	SW846	8260B
ND	50.0	30.4				SW846	8260B
ND	50.0	30.9			1.6	SW846	8260B
ND	50.0	31.4				SW846	8260B
ND	50.0	31.2			0.51		
ND	50.0	33.7					
ND	50.0	32.5	ug/kg	65 a	3.7		
		PERCENT	•	RECOVERY			
_			-		0)		
				•	•		
				•	•		
				-	•		
				•	•		
			÷				
					•		
		J4 .		(// - 11	/)		
	ND ND ND ND ND ND ND ND	ND 50.0 ND 50.0 ND 50.0 ND 50.0 ND 50.0 ND 50.0 ND 50.0 ND 50.0 ND 50.0 ND 50.0	ND 50.0 36.1 ND 50.0 34.4 ND 50.0 33.5 ND 50.0 33.0 ND 50.0 30.4 ND 50.0 30.9 ND 50.0 31.4 ND 50.0 31.2 ND 50.0 33.7 ND 50.0 32.5	ND 50.0 36.1 ug/kg ND 50.0 34.4 ug/kg ND 50.0 33.5 ug/kg ND 50.0 33.0 ug/kg ND 50.0 30.4 ug/kg ND 50.0 30.9 ug/kg ND 50.0 31.4 ug/kg ND 50.0 31.2 ug/kg ND 50.0 32.5 ug/kg ND 50.0 32.5 ug/kg ND 50.0 32.5 ug/kg ND 50.0 32.5 ug/kg PERCENT RECOVERY 107 110 121 124 101 100 90	ND 50.0 36.1 ug/kg 72 a ND 50.0 34.4 ug/kg 69 a ND 50.0 33.5 ug/kg 67 a ND 50.0 33.0 ug/kg 66 a ND 50.0 30.4 ug/kg 61 a ND 50.0 30.9 ug/kg 62 a ND 50.0 31.4 ug/kg 63 a ND 50.0 31.2 ug/kg 62 a ND 50.0 32.5 ug/kg 65 a PERCENT RECOVERY RECOVERY 107 (80 - 12 110 (80 - 12 124 (79 - 12) 104 (71 - 13) 100 (71 - 13) 100 (77 - 11)	ND 50.0 36.1 ug/kg 72 a ND 50.0 34.4 ug/kg 69 a 4.9 ND 50.0 33.5 ug/kg 67 a ND 50.0 33.0 ug/kg 66 a 1.5 ND 50.0 30.4 ug/kg 61 a ND 50.0 30.9 ug/kg 63 a ND 50.0 31.4 ug/kg 63 a ND 50.0 31.2 ug/kg 62 a 0.51 ND 50.0 32.5 ug/kg 65 a 3.7 PERCENT RECOVERY LIMITS 107 (80 - 120) 110 (80 - 120) 121 (79 - 125) 124 (79 - 125) 100 (71 - 132) 90 (77 - 117)	ND 50.0 36.1 ug/kg 72 a SW846 ND 50.0 34.4 ug/kg 69 a 4.9 SW846 ND 50.0 33.5 ug/kg 67 a SW846 ND 50.0 33.0 ug/kg 66 a 1.5 SW846 ND 50.0 30.4 ug/kg 61 a SW846 ND 50.0 30.9 ug/kg 62 a 1.6 SW846 ND 50.0 31.4 ug/kg 63 a SW846 ND 50.0 31.2 ug/kg 62 a 0.51 SW846 ND 50.0 32.5 ug/kg 65 a 3.7 SW846 ND 50.0 32.5 ug/kg 65 a 3.7 SW846 ND 50.0 32.5 ug/kg 67 a SW846 ND 50.0 32.5 ug/kg 62 a 0.51 SW846 ND 50.0 32.5 ug/kg 62

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: ENQ7P1AD-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120155-005 ENQ7P1AE-MSD

 Date Sampled...:
 11/07/01 14:20 Date Received..:
 11/10/01

 Prep Date....:
 11/19/01 Analysis Date..:
 11/19/01

 Prep Batch #...:
 1324469 Analysis Time..:
 16:38

 Dilution Factor:
 1
 Moisture....:
 15

1,1-Dichloroethene 68 a (78 - 118) 70 a (78 - 118) 2.2 (0 Benzene 64 a (79 - 121) 68 a (79 - 121) 5.0 (0 Chlorobenzene 60 a (76 - 116)	-25) SW846 SW846 -25) SW846 SW846	8260B 8260B 8260B 8260B 8260B 8260B
70 a (78 - 118) 2.2 (0 Benzene 64 a (79 - 121) 5.0 (0 Chlorobenzene 60 a (76 - 116) 3.6 (0	-25) SW846 SW846 -25) SW846 SW846 -25) SW846	8260B 8260B 8260B 8260B 8260B
Benzene 64 a (79 - 121) 68 a (79 - 121) 5.0 (0 Chlorobenzene 60 a (76 - 116) 62 a (76 - 116) 3.6 (0	SW846 -25) SW846 SW846 -25) SW846	8260B 8260B 8260B 8260B
Chlorobenzene 68 a (79 - 121) 5.0 (0 Chlorobenzene 60 a (76 - 116) 62 a (76 - 116) 3.6 (0	-25) SW846 SW846 -25) SW846	8260B 8260B 8260B
Chlorobenzene 60 a (76 - 116) 62 a (76 - 116) 3.6 (0	SW846 -25) SW846	8260B 8260B
62 a (76 - 116) 3.6 (0	-25) SW846	8260B
===,		
Toluene 59 a (76 - 116)	SW846	
		8260B
64 a (76 - 116) 7.6 (0	-25) SW846	8260B
Trichloroethene 67 a (83 - 123)	SW846	8260B
67 a (83 - 123) 0.49 (0	-25) SW846	8260B
PERCENT RE	COVERY	
	MITS	
Dibromofluoromethane 105 (8	0 - 120)	
	0 - 120)	
1,2-Dichloroethane-d4 112 (7	9 - 125)	
	9 - 125)	
	1 - 132)	
	1 - 132)	
	7 - 117)	
	7 - 117)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: ENQ7P1AD-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120155-005 ENQ7P1AE-MSD

 Date Sampled...:
 11/07/01-14:20
 Date Received...:
 11/10/01

 Prep Date....:
 11/19/01
 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1324469
 Analysis Time...:
 16:38

 Dilution Factor:
 1
 * Moisture....:
 15

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	AMOUNT	<u>TMA</u>	TRUOMA	UNITS	RECOVERY	RPD	METHOI)
1,1-Dichloroethene	ND	50.0	34.2	ug/kg	68 a		SW846	8260B
	ND	50.0	35.0	ug/kg	70 a	2.2	SW846	8260B
Benzene	ND	50.0	32.1	ug/kg	64 a		SW846	8260B
	ND	50.0	33.8	ug/kg	68 a	5.0	SW846	8260B
Chlorobenzene	ND	50.0	29.9	ug/kg	60 a		SW846	8260B
	ND	50.0	31.0	ug/kg	62 a	3.6	SW846	8260B
Toluene	ND	50.0	29.5	ug/kg	59 a		SW846	8260B
	ND	50.0	31.9	ug/kg	64 a	7.6	SW846	8260B
Trichloroethene	ND	50.0	33.3	ug/kg	67 a		SW846	8260B
•	ND	50.0	33.5	ug/kg	67 a	0.49	SW846	8260B
			+	•				
			PERCENT		RECOVERY			
SURROGATE	_		RECOVERY	<u>r</u>	LIMITS			
Dibromofluoromethane			105		(80 - 120))		
			101		(80 - 120))		
1,2-Dichloroethane-d4			112		(79 - 125	5)		
			105		(79 - 125	5)		•
4-Bromofluorobenzene			101 ′		(71 - 132	?)		
			98		(71 - 132	2)		
Toluene-d8			98		(77 - 117	')		
			101		(77 - 117	')		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: ENQ7C1AD-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120155-003 ENQ7C1AE-MSD

Date Sampled...: 11/07/01 13:50 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/20/01

Prep Batch #...: 1330178 Analysis Time..: 14:26

Dilution Factor: 1 % Moisture....: 14

	PERCENT	RECOVERY		RPD		
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD	
1,1-Dichloroethene	76	(54 - 129)			SW846 82	260B
	77	(54 - 129)	2.6	(0-30)	SW846 82	260B
Benzene	. 86	(73 - 119)			SW846 82	260B
	90	(73 - 119)	5.6	(0-30)	SW846 82	260B
Chlorobenzene	90	(70 - 120)			SW846 82	260B
	93	(70 ~ 120)	4.2	(0-30)	SW846 82	260B
Trichloroethene	90	(76 - 118)			SW846 82	260B
	90	(76 - 118)	1.8	(0-30)	SW846 82	260B
Toluene	91	(71 - 119)		•	SW846 82	260B
•	90	(71 - 119)	0.42	(0-30)	SW846 82	260B
		PERCENT		RECOVERY		
SURROGATE		RECOVERY		LIMITS		
Dibromofluoromethane		91		(72 - 121)	
		92		(72 - 121) .	
1,2-Dichloroethane-d4		86 .	•	(53 - 131) .	
•		88		(53 - 131)	
4-Bromofluorobenzene		98		(71 - 127)	
		100		(71 - 127)	
Toluene-d8		97		(57 - 130)	
		99		(57 - 130) .	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: ENQ7C1AD-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120155-003 ENQ7C1AE-MSD

 Date Sampled...:
 11/07/01 13:50
 Date Received...:
 11/10/01

 Prep Date.....:
 11/19/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1330178
 Analysis Time...:
 14:26

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO	o '.
1,1-Dichloroethene	ND	1930	1460	ug/kg	76		SW846	8260B
	ND	1960	1500	ug/kg	77	2.6	SW846	8260B
Benzene	ND	1930	1670	ug/kg	86		SW846	8260B
	ND	1960	1760	ug/kg	90	5.6	SW846	8260B
Chlorobenzene	ND	1930	1740	ug/kg	90		SW846	8260B
	ND	1960	1810	ug/kg	93	4.2	SW846	8260B
Trichloroethene	ND	1930	1740	ug/kg	90		SW846	8260B
	ND ·	1960	1770	ug/kg	90	1.8	SW846	8260B
Toluene	ND	1930	1760	ug/kg	91		SW846	8260B
	ND	1960	1760	ug/kg	90	0.42	SW846	8260B
	-		PERCENT		RECOVERY			
SURROGATE			RECOVER	<u>Y</u>	LIMITS			
Dibromofluoromethane			91		(72 - 123	L)		
			92		(72 - 123	L)		
1,2-Dichloroethane-d4			8.6	*	(53 - 131	L)		
	-		88		(53 - 131	L)		
4-Bromofluorobenzene			98	•	(71 - 127	7)		
			100		(71 - 127	7)		
Toluene-d8	•		97		(57 - 130	j)		•
			99		(57 - 130))		
•								

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: ENLQT1A2-MS Matrix.....: SOLID

MS Lot-Sample #: D1K080340-003 ENLQT1A3-MSD

 Date Sampled...:
 11/06/01 09:15
 Date Received..:
 11/08/01

 Prep Date....:
 11/17/01
 Analysis Date..:
 11/17/01

 Prep Batch #...:
 1323329
 Analysis Time..:
 16:18

						The second
	PERCENT	RECOVERY	:	RPD		
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD	
1,1-Dichloroethene	81	(54 - 129)			SW846 8260	В
	79	(54 - 129)	2.9	(0-30)	SW846 8260	В
Benzene	90	(73 ~ 119)			SW846 8260	В
. •	91	(73 - 119)	0.85	(0-30)	SW846 8260	В
Chlorobenzene	87	(70 - 120)			SW846 8260	В
	90	(70 - 120)	2.6	(0-30)	SW846 8260	В
Trichloroethene	93	. (76 - 118)			SW846 8260	В
	90	(76 - 118)	3.8	(0-30)	SW846 8260	В
Toluene	87	(71 - 119)			SW846 82601	В
	87	(71 - 119)	0.10	(0-30)	SW846 8260	В
		PERCENT		RECOVERY		
SURROGATE		RECOVERY		LIMITS		
Dibromofluoromethane	-	91		(72 - 12)	L)	•
		92		(72 - 123	L)	
1,2-Dichloroethane-d4		80		(53 - 13)	L) .	
		82		(53 - 131	L)	
4-Bromofluorobenzene		93		(71 - 127	7)	
		97		(71 - 127	7)	
Toluene-d8		99		(57 - 130))	
	4	101		(57 - 130))	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: ENLQT1A2-MS Matrix.....: SOLID

MS Lot-Sample #: D1K080340-003 ENLQT1A3-MSD

 Date Sampled...:
 11/06/01 09:15
 Date Received..:
 11/08/01

 Prep Date....:
 11/17/01
 Analysis Date..:
 11/17/01

 Prep Batch #...:
 1323329
 Analysis Time..:
 16:18

 Dilution Factor:
 1
 % Moisture....:
 24

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	TRUOMA	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO)
1,1-Dichloroethene	ND	2540	2050	ug/kg	81		SW846	8260B
	ND	2520	1990	ug/kg	79	2.9	SW846	8260B
Benzene	ND	2540	2270	ug/kg	90		SW846	8260B
ť	ND	2520	2290	ug/kg	91	0.85	SW846	8260B
Chlorobenzene	ND	2540	2210	ug/kg	87		SW846	8260B
A.	ND	2520	2270	ug/kg	90	2.6	SW846	8260B
Trichloroethene	ND	2540	2360	ug/kg	93		SW846	8260B
	ND	2520	2270	ug/kg	90	3.8	SW846	8260B
Toluene	ND	2540	2200	ug/kg	87		SW846	8260B
	ND	2520	2200	ug/kg	87	0.10	SW846	8260B

	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	91	(72 - 121)	
	92	(72 - 121)	
1,2-Dichloroethane-d4	80	(53 - 131)	
	82	(53 - 131)	
4-Bromofluorobenzene	93	(71 - 127)	
	97	(71 - 127)	
Toluene-d8	99	(57 - 130)	
	101	(57 - 130)	•

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: ENRE41AC-MS Matrix..... WATER

MS Lot-Sample #: D1K120155-023 ENRE41AD-MSD

 Date Sampled...:
 11/08/01 10:00 Date Received...:
 11/10/01

 Prep Date....:
 11/19/01 Analysis Date...:
 11/19/01

 Prep Batch #...:
 1325351 Analysis Time...:
 15:25

Dilution Factor: 40

	PERCENT	RECOVERY		RPD		
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHO	<u> </u>
1,1-Dichloroethene	94	(79 - 119)		•	SW846	8260B
	92	(79 - 119)	1.2	(0-20)	SW846	8260B
Benzene	94	(79 - 119)			SW846	8260B
	93	(79 - 119)	1.1	(0-20)	SW846	8260B
Chlorobenzene	87	(76 - 116)			SW846	8260B
	88	(76 - 116)	0.71	(0-20)	SW846	8260B
Toluene	88	(75 - 122)			SW846	8260B
	87	(75 - 122)	0.46	(0-20)	SW846	8260B
Trichloroethene	94	(81 - 121)			SW846	8260B
	94	(81 - 121)	0.24	(0-20)	SW846	8260B
	*	PERCENT		RECOVERY		
SURROGATE		RECOVERY		LIMITS		•
Dibromofluoromethane		112		(80 - 120)	
,		115		(80 - 120)	
1,2-Dichloroethane-d4		118		(72 - 127))	
•		119		(72 - 127))	
4-Bromofluorobenzene		86		(79 - 119))	
		86		(79 - 119))	
Toluene-d8		91		(79 - 119))	
		94		(79 - 119))	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K120155 Work Order #...: ENRE41AC-MS Matrix..... WATER

MS Lot-Sample #: D1K120155-023 ENRE41AD-MSD

 Date Sampled...:
 11/08/01 10:00
 Date Received..:
 11/10/01

 Prep Date....:
 11/19/01
 Analysis Date..:
 11/19/01

 Prep Batch #...:
 1325351
 Analysis Time..:
 15:25

Dilution Factor: 40

	SAMPLE	SPIKE	MEASRD		PERCENT			-
PARAMETER	TNUOMA	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOI) ·
1,1-Dichloroethene	ND	400	374	ug/L	94		SW846	8260B
• • • • • • • • • • • • • • • • • • •	ND	400	370	ug/L	92	1.2	SW846	8260B
Benzene	ND	400	377	ug/L	94		SW846	8260B
	ND	400	372	ug/L	93	1.1	SW846	8260B
Chlorobenzene	ND	400	348	ug/L	87		SW846	8260B
	ND	400	351	ug/L	88	0.71	SW846	8260B
Toluene	ND	400	350	ug/L	88		SW846	8260B
	ND	400	349	ug/L	87	0.46	SW846	8260B
Trichloroethene	40	400	414	ug/L	94		SW846	8260B
	40	400	416	ug/L	94	0.24	SW846	8260B
	•		*					
•			PERCENT		RECOVERY			
SURROGATE			RECOVER	<u>Y</u>	LIMITS			
Dibromofluoromethane			112		(80 - 120	1)		
			115		(80 - 120)		•
1,2-Dichloroethane-d4			118		(72 - 127)		
			119		(72 - 127)		
4-Bromofluorobenzene			86		(79 - 119)		
			86		(79 - 119)		•
Toluene-d8			91	•	(79 - 119)		
			94		(79 - 119)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D1K120155 Work Order #...: EPDK41AC Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-202

Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Prep Batch #...: 1325202 Analysis Time..: 15:45

Dilution Factor: 1

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
Acenaphthene	71	(49 - 93)	SW846 8270C
Pyrene	74	(48 - 97)	SW846 8270C
4-Chloro-3-methylphenol	73	(52 - 93)	SW846 8270C
2-Chlorophenol	74	(51 - 91)	SW846 8270C
1,4-Dichlorobenzene	67	(46 - 86)	SW846 8270C
2,4-Dinitrotoluene	73	(53 - 105)	SW846 8270C
4-Nitrophenol	68	(29 - 115)	SW846 8270C
N-Nitrosodi-n-propyl- amine	71	(46 - 86)	SW846 8270C
Pentachlorophenol	68	(27 - 97)	SW846 8270C
Phenol	74	(50 - 90)	SW846 8270C
1,2,4-Trichloro- benzene	70	(49 - 90)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	74	(34 - 97)
Phenol-d5	74	(39 - 90)
Nitrobenzene-d5	73	(33 - 97)
2-Fluorobiphenyl	72	(39 - 91)
2,4,6-Tribromophenol	71	(29 - 95)
Terphenyl-d14	79	(30 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D1K120155 Work Order #...: EPDK41AC

Matrix..... SOLID

LCS Lot-Sample#: D1K210000-202

Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Prep Batch #...: 1325202 Analysis Time..: 15:45

Dilution Factor: 1

	SPIKE	MEASURED		PERCENT	
PARAMETER	AMOUNT	TRUOMA	UNITS	RECOVERY	METHOD
Acenaphthene	3330	2370	ug/kg	71	SW846 8270C
Pyrene	3330	2460	ug/kg	74	SW846 8270C
4-Chloro-3-methylphenol	5000	3650	ug/kg	73	SW846 8270C
2-Chlorophenol	5000	. 3720	ug/kg	74	SW846 8270C
1,4-Dichlorobenzene	3330	2240	ug/kg	67	SW846 8270C
2,4-Dinitrotoluene	3330	2430	ug/kg	73	SW846 8270C
4-Nitrophenol	5000	3390	ug/kg	68	SW846 8270C
N-Nitrosodi-n-propyl-	3330	2370	ug/kg	71	SW846 8270C
amine					
Pentachlorophenol	5000	3400	ug/kg	68	SW846 8270C
Phenol	5000	3680	ug/kg	74	SW846 8270C
1,2,4-Trichloro-	3330	2330	ug/kg	70	SW846 8270C
benzene					

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
2-Fluorophenol	74	(34 - 97)
Phenol-d5	74	(39 - 90)
Nitrobenzene-d5	73	(33 - 97)
2-Fluorobiphenyl	72	(39 - 91)
2,4,6-Tribromophenol	71	(29 - 95)
Terphenyl-d14	79	(30 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D1K120155

Work Order #...: EPDK41AA

Matrix..... SOLID

MB Lot-Sample #: D1K210000-202

Prep Date....: 11/21/01
Prep Batch #...: 1325202

Analysis Time..: 15:22

Analysis Date..: 11/25/01

Dilution Factor: 1

REPORTING

PARAMETER	RESULT	LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330 '	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl)	ND	330	ug/kg	SW846 8270C
phthalate				
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C
	PERCENT	RECOVERY	Z.	•
SURROGATE	RECOVERY	LIMITS		
2-Fluorophenol	71	(34 - 97	7)	
Phenol-d5	69	(39 - 90))	
Nitrobenzene-d5	70	(33 - 97	7)	
2-Fluorobiphenyl	68	(39 - 91	L)	
2,4,6-Tribromophenol	63	(29 - 95	5)	
Terphenyl-d14	76	(30 - 10	02)	•
NOTE(S):		•		

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D1K120155 Work Order #...: ENQ141AP-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-004 ENQ141AQ-MSD

 Date Sampled...:
 11/09/01 09:20
 Date Received...:
 11/10/01

 Prep Date.....:
 11/21/01
 Analysis Date...:
 11/25/01

 Prep Batch #...:
 1325202
 Analysis Time...:
 18:04

 Dilution Factor:
 1
 % Moisture....:
 18

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
Acenaphthene	66	(49 - 93)			SW846 8270C
· .	66	(49 - 93)	0.42	(0-40)	SW846 8270C
Pyrene	64	(48 - 97)			SW846 8270C
	68	(48 - 97)	7.0	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	67	(52 - 93)			SW846 8270C
	68	(52 - 93)	0.72	(0-40)	SW846 8270C
2-Chlorophenol	68	(51 - 91)			SW846 8270C
	69	(51 - 91)	1.6	(0-36)	SW846 8270C
1,4-Dichlorobenzene	62	(46 - 86)			SW846 8270C
	61	(46 - 86)	2.5	(0-40)	SW846 8270C
2,4-Dinitrotoluene	70	(53 - 105)			SW846 8270C
•	· 66	(53 - 105)	5.6	(0-40)	SW846 8270C
4-Nitrophenol	58	(29 - 115)			SW846 8270C
_	60	(29 - 115)	3.2	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl- amine	67	(46 - 86)			SW846 8270C
	67	(46 - 86)	0.60	(0-40)	SW846 8270C
Pentachlorophenol	60	(27 - 97)			SW846 8270C
	64	(27 - 97)	6.1	(0-40)	SW846 8270C
Phenol	67	(50 - 90)			SW846 8270C
	67	(50 - 90)	0.48	(0-37)	SW846 8270C
1,2,4-Trichloro- benzene	63	(49 - 90)			SW846 8270C
	63	(49 - 90)	1.2	(0-40)	SW846 8270C
		PERCENT		RECOVERY	
SURROGATE		RECOVERY		LIMITS	
2-Fluorophenol	-	68		(34 - 97)	-
• • • • • • • • • • • • • • • • • • •		66		(34 - 97)	
Phenol-d5		67		(39 - 90)	
		65		(39 - 90)	•
Nitrobenzene-d5		66		(33 - 97)	
		67		(33 - 97)	
2-Fluorobiphenyl		65			
- Lactorphony L		65		(39 - 91)	
2,4,6-Tribromophenol				(39 - 91)	
z'z'o-iripromobilenor		68		(29 - 95)	

(Continued on next page)

(29 - 95)

67

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D1K120155 Work Order #...: ENQ141AP-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-004 ENQ141AQ-MSD

 SURROGATE
 PERCENT RECOVERY LIMITS

 Terphenyl-d14
 66 (30 - 102)

 67 (30 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D1K120155 Work Order #...: ENQ141AP-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-004 ENQ141AQ-MSD

 Date Sampled...:
 11/09/01 09:20
 Date Received...:
 11/10/01

 Prep Date.....:
 11/21/01
 Analysis Date...:
 11/25/01

 Prep Batch #...:
 1325202
 Analysis Time...:
 18:04

 Dilution Factor:
 1
 * Moisture....:
 18

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO	Ď
Acenaphthene	ND	3330	2210	ug/kg	66		SW846	8270C
	ND	3330	2200	ug/kg	66	0.42	SW846	8270C
Pyrene	ND	3330	2120	ug/kg	64		SW846	8270C
	ND	3330	2280	ug/kg	68	7.0	SW846	8270C
4-Chloro-3-methylphenol	ND	5000	3360	ug/kg	67 :		SW846	8270C
	ND	5000	3380	ug/kg	68	0.72	SW846	8270C
2-Chlorophenol	ND	5000	3380	ug/kg	68	•	SW846	8270C
	ND	5000	3440	ug/kg	69	1.6	SW846	8270C
1,4-Dichlorobenzene	ND ·	3330	2070	ug/kg	62		SW846	8270C
	ND	3330	2020	ug/kg	61	2.5	SW846	8270C
2,4-Dinitrotoluene	ND	3330	2320	ug/kg	70		SW846	8270C
	ND	3330	2190	ug/kg	66	5.6	SW846	8270C
4-Nitrophenol	ND	5000	2920	ug/kg	58		SW846	8270C
	ND	5000	3010	ug/kg	60	3.2	SW846	8270C
N-Nitrosodi-n-propyl- amine	ND	3330	2250	ug/kg	67		SW846	8270C
	ND	3330	2240	ug/kg	67	0.60	SW846	8270C
Pentachlorophenol	ND	5000	3010	ug/kg	60		SW846	8270C
<u> </u>	ND	5000	3200	ug/kg	64	6.1	SW846	8270C
Phenol	ND	5000	3330	ug/kg	67		SW846	8270C
•	ND	5000	3350	ug/kg	67	0.48	SW846	8270C
1,2,4-Trichloro- benzene	ND	3330	2110	ug/kg	63		SW846	8270C
	ND	3330	2080	ug/kg	63	1.2	SW846	8270C
		*					•	

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
2-Fluorophenol	68	(34 - 97)
	66	(34 - 97)
Phenol-d5	67	(39 - 90)
	65	(39 - 90)
Nitrobenzene-d5	66	(33 - 97)
	67	(33 - 97)
2-Fluorobiphenyl	65	(39 - 91)
	65	(39 - 91)
2,4,6-Tribromophenol	68	(29 - 95)
*	67	(29 - 95)

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D1K120155

Work Order #...: ENQ141AP-MS

Matrix..... SOLID

MS Lot-Sample #: D1K120137-004

ENQ141AQ-MSD

 SURROGATE
 PERCENT
 RECOVERY

 Terphenyl-d14
 66
 (30 - 102)

 67
 (30 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Matrix....: SOLID

11/15-11/18/01 1319444

11/15-11/18/01 1319444

11/15-11/18/01 1319444

11/15-11/18/01 1319444

11/15-11/18/01 1319444

11/15-11/18/01 1319444

11/15-11/18/01 1319444

11/15-11/18/01 1319444

PERCENT RECOVERY RPD PREPARATION-PREP-RECOVERY PARAMETER LIMITS RPD LIMITS METHOD ANALYSIS DATE BATCH # 102 (82 - 113)Mercury SW846 7471A 11/19/01 1317288 (82 - 113) 3.6 98 SW846 7471A 11/19/01 (0-20)1317288 Dilution Factor: 1 Arsenic 97 (87 - 107)SW846 6010B 11/15-11/18/01 1319444 (87 - 107) 2.1 (0-20)99 SW846 6010B 11/15-11/18/01 1319444 Dilution Factor: 1 Barium 95 (86 - 114)SW846 6010B 11/15-11/18/01 1319444 (86 - 114) 1.6 (0-20)97 SW846 6010B 11/15-11/18/01 1319444 Dilution Factor: 1 Cadmium 95 (89 - 109)SW846 6010B 11/15-11/18/01 1319444 (89 - 109) 2.1 (0-20) 97 SW846 6010B 11/15-11/18/01 1319444 Dilution Factor: 1

SW846 6010B

SW846 6010B

SW846 6010B

SW846 6010B

SW846 6010B

SW846 6010B

SW846 6010B

SW846 6010B

NOTE(S):

Chromium

Selenium

Silver

Lead

Calculations are performed before rounding to avoid round-off errors in calculated results.

Lot-Sample #...: D1K120155

98

97

98

94

97

101

102

100

(88 - 110)

(88 - 108)

(86 - 107)

(88 - 108)

(88 - 110) 1.9 (0-20)

(88 - 108) 1.6 (0-20)

(86 - 107) 2.6 (0-20)

(88 - 108) 1.5 (0-20)

Dilution Factor: 1

Dilution Factor: 1

Dilution Factor: 1

Dilution Factor: 1

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: D1K120155

Matrix..... SOLID

	SPIKE	MEASURED		PERCNT				PREPARATION-	PREP
PARAMETER	AMOUNT	AMOUNT	UNITS	RECVRY	RPD	METHO	D	ANALYSIS DATE	BATCH #
Mercury	0.417	0.424	mg/kg	102		SW846	7471A	11/19/01	1317288
	0.417	0.409	mg/kg	98	3.6	SW846	7471A	11/19/01	1317288
		ם	ilution Fac	tor: 1					•
Arsenic	200	194	mg/kg	97		SW846	6010B	11/15-11/18/01	
	200	198	mg/kg	99	2.1	SW846	6010B	11/15-11/18/01	1319444
		D	ilution Fact	tor: 1					
Barium	200	190	mg/kg	95			6010B	11/15-11/18/01	
+ *	200	193	mg/kg	97	1.6	SW846	6010B	11/15-11/18/01	1319444
		D:	ilution Fact	tor: 1					
Cadmium	5.00	4.73	mg/kg	95			6010B	*11/15-11/18/01	
	5.00	4.83	mg/kg	97	2.1	SW846	6010B	11/15-11/18/01	1319444
		D:	llution Fact	or: 1					
Chromium	20.0	19.7	mg/kg	98		SW846	6010B	11/15-11/18/01	1319444
· .	20.0	20.1.	mg/kg	100	1.9	SW846	6010B	11/15-11/18/01	1319
	·	Di	lution Fact	or: 1			·		
Lead	50.0	48.4	mg/kg	97		SW846	6010B	11/15-11/18/01	1319444
	50.0	49.2	mg/kg	98	1.6	SW846	6010B	11/15-11/18/01	1319444
	*	Di	lution Fact	or: 1					
Selenium	200	188	mg/kg	94		SW846	6010B	11/15-11/18/01	1319444
	200	193	mg/kg	97	2.6	SW846	6010B	11/15-11/18/01	1319444
,		Di	lution Fact	or: 1					
Silver	5.00	5.04	mg/kg	101		SW846	6010B	11/15-11/18/01	1319444
	5.00	5.11	mg/kg	102	1.5	SW846	6010B	11/15-11/18/01	1319444
		Di	lution Fact	or: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: D1K120155 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- WORK ANALYSIS DATE ORDER #
		0 000 D - D-t-T- !!	7.7.7.7.000	
Mercury	ND **: DIKI3000	0-288 Prep Batch #: 0.033 mg/kg	: 1317288 SW846 7471A	11/19/01 ENT951AA
Meredry	ND	Dilution Factor: 1	DW040 /4/1A	II/IJ/UI : ENIJSIAA
•		Analysis Time: 22:38	3	
				*
	÷			
MB Lot-Sample	#: D1K15000	0-444	1319444	
Arsenic	ND	1.0 mg/kg	. SW846 6010B	11/15-11/18/01 EN2231AC
		Dilution Factor: 1		
		Analysis Time: 17:49		
Barium	ND	1.0 mg/kg	SW846 6010B	11/15-11/18/01 EN2231DH
		Dilution Factor: 1		
		Analysis Time: 17:49		
Cadmium	ND	0.50 mg/kg	SW846 6010B	11/15-11/18/01 EN2231AF
		Dilution Factor: 1	•	
	F	Analysis Time: 17:49	,	
Chromium	ND	1.0 mg/kg	SW846 6010B	11/15-11/18/01 EN2231DJ
	•	Dilution Factor: 1		, , ,
		Analysis Time: 17:49		
Lead	ND	0.80 mg/kg	SW846 6010B	11/15-11/18/01 EN2231AK
4		Dilution Factor: 1		, , , , , , , , , , , , , , , , , , , ,
		Analysis Time: 17:49		
	•			
Selenium	ND	1.3 mg/kg	SW846 6010B	11/15-11/18/01 EN2231AN
•		Dilution Factor: 1		
*		Analysis Time: 17:49		
Silver	ND	1.0 mg/kg	SW846 6010B	11/15-11/18/01 EN2231AP
		Dilution Factor: 1		•
		Analysis Time: 17:49		
NOTE(S):				
101B(B).			· · · · · · · · · · · · · · · · · · ·	

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #		0155 5/01 10:40 Date Received.	.: 11/08/01	Matrix	: SOLID
PARAMETER	PERCENT RECOVERY	RECOVERY RPD LIMITS RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sampl Mercury	e #: D1K09 89 98	00222-001 Prep Batch # (82 - 113) (82 - 113) 9.7 (0-20) Dilution Factor: 1 Analysis Time: 22:44	SW846 7471A SW846 7471A	11/19/01 11/19/01	ENM7M1A9 ENM7M1CA
MS Lot-Sampl Arsenic	.e #: D1K09 93 91	0222-001 Prep Batch # (87 - 107) (87 - 107) 2.1 (0-20) Dilution Factor: 1 Analysis Time: 18:15	SW846 6010B	11/15-11/18/01 11/15-11/18/01	
Barium	90	(86 - 114) (86 - 114) 0.21 (0-20) Dilution Factor: 1 Analysis Time: 18:15	SW846 6010B SW846 6010B	11/15-11/18/01 11/15-11/18/01	
Cadmium	90 89	(89 - 109) (89 - 109) 0.91 (0-20) Dilution Factor: 1 Analysis Time: 18:15	SW846 6010B SW846 6010B	11/15-11/18/01 11/15-11/18/01	
Chromium	90 92	(88 - 110) (88 - 110) 1.6 (0-20) Dilution Factor: 1 Analysis Time: 18:15	SW846 6010B SW846 6010B	11/15-11/18/01 11/15-11/18/01	
Lead	92 91	(88 - 108) (88 - 108) 0.35 (0-20) Dilution Factor: 1 Analysis Time: 18:15	SW846 6010B SW846 6010B	11/15-11/18/01 11/15-11/18/01	
Selenium	90 89	(86 - 107) (86 - 107) 1.4 (0-20) Dilution Factor: 1 Analysis Time: 18:15	SW846 6010B SW846 6010B	11/15-11/18/01 11/15-11/18/01	
Silver	92 89	(88 - 108) (88 - 108) 3.7 (0-20) Dilution Factor: 1 Analysis Time: 18:15	SW846 6010B SW846 6010B	11/15-11/18/01 11/15-11/18/01	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

NOTE(S):

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

		D1K120155									
Date Samp	led:	11/05	/01 10:4	O Date Rece	eived:	11/08/	01				
	ŞAMPLE	SPIKE	MEASUREI)	PERC	NT			PREPARATION-	WORK	
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECV	RY RPD	METHO	D	ANALYSIS DATE	ORDER #	
MS Lot-Sa	mole #.	מאות	0222-001	Prep Bato	.h.# .	121720					
Mercury	mbre #:	DIRUG	0222-001	riep bacc	-II # · · · ·	131/20	•		•		
•	ND	0.455	0.407	mg/kg	89		SW846	7471A	11/19/01	ENM7M1A9	
	ND	0.455	0.448	mg/kg	98	9.7	SW846	7471A	11/19/01	ENM7M1CA	
				ution Factor:							
•			Ana	lysis Time:	22:44		,				
	mple #:	D1K09	0222-001	Prep Bato	h #:	131944	4		•		
Arsenic	1.4	27.0	204	/1			GEIG 4.C	60100	11/15 11/10/01		
	1.4	218 218	204 200	mg/kg mg/kg	93 91	2.1		6010B 6010B	11/15-11/18/01 11/15-11/18/01		
	1.1	210		ution Factor:		2.1	DMO40	60105	11/13-11/18/01	ENM/MICH	
				lysis Time:	_				ŕ		
Barium	40.5								/ / /		
	40.3 40.3	200	221 221	mg/kg	.90 90	0 01		6010B	11/15-11/18/01 11/15-11/18/01		
1	40.3	200		mg/kg ution Factor:		0.21	SW846	POTOR	11/15-11/18/01	ENM/MIDX	
				lysis Time:							
				_							
Cadmium											
	ND	5.45	4.92	mg/kg	90			6010B	11/15-11/18/01		
	ND	5.45	4.88	mg/kg ution Factor:	89	0.91	SW846	6010B	11/15-11/18/01	ENM7M1CP	
				ution factor: lysis Time:							
			•	1,010 11	10.15						
Chromium											
		20.0	22.9	mg/kg	90		SW846	6010B	11/15-11/18/01		
	4.8	20.0	23.3	mg/kg	92	1.6	SW846	6010B	11/15-11/18/01	ENM7M1D2	
				ution Factor:							
			Ana.	lysis Time:	18:15						
Lead				*							
	5.9	54.5	55.9	mg/kg	92		SW846	6010B	11/15-11/18/01	ENM7M1CX	
	5.9	54.5	55.7	mg/kg	91	0.35	SW846	6010B	11/15-11/18/01	ENM7M1C0	
				tion Factor:							
			Anal	lysis Time:	18:15						
Selenium								•			
	ND	218	197	mg/kg	90		SW846	6010B	11/15-11/18/01	ENM7M1C5	
			194	mg/kg	89	1.4	SW846		11/15-11/18/01		
•			Dilu	tion Factor:	1						
•			Anal	ysis Time:	18:15						

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D1K120155

Matrix....: SOLID

Date Sampled...: 11/05/01 10:40 Date Received..: 11/08/01

PARAMETER Silver			MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
DIIACI									
	ND	5.45	5.04	mg/kg	92		SW846 6010B	11/15-11/18/01	ENM7M1C7
	ND	5.45	4.86	mg/kg	89	3.7	SW846 6010B	11/15-11/18/01	ENM7M1C8
,			Dilut	ion Factor: 1					
			Analy	sis Time 18	:15				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

HOLD TIME REPORT

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GCMS VOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif	Ext Hold	Ana Eold	Extraction Date	Analysis Date		Method Descript
D1K120155001	B-70-18	11/07/01	11:45			 ·	·				
			8260B		10		14		11/17/01	12:47	VOA
D1K120155002	B-76-4	11/07/01	13:30	÷							
,			8260B		12		14	-	11/19/01	19:49	VOA
D1K120155003	B-76-16	11/07/01	13:50								
			8260B		13	•	14		11/20/01	14:01	VOA
			8260B		13		14	v ·	11/20/01	14:01	VOA
D1K120155004	B-57-4	11/07/01	14:04								
			8260B		12		14		11/19/01	15:44	AOV
D1K120155005	B-57-15	11/07/01	14:20					•	· •		
			8260B		12		14		11/19/01	16:11	VOA
D1K120155006	B-58-4·	11/07/01	14:45								
			8260B		12		14		11/19/01	17:32	VOA ,
D1K120155007	B-58-16	11/07/01	15:00					•			
			8260B		10		14	•	11/17/01	15:03	VOA
D1K120155008	B-52-4	11/07/01		1							
			8260B		10		14		11/17/01	15:30	VOA
D1K120155009	B-52 - 15	11/07/01									
•			8260B		10		14		11/17/01	18:46	VOA
21/100155010	D 51 4		8260B		10		14		11/17/01	18:46	VOA
D1K120155010	B-51-4	11/07/01									
D1V120155011	D E1 16	11.407.401	8260B		12		14	•	11/19/01	18:00	VOA
D1K120155011	B-51-15	11/07/01			10		1.4	•			
D1K120155012	B-49-4	:1/07/0:	82608		12		14		11/19/01	18:27	VOA
DIR120133012	D-49-4	11/07/01	8260B		12		14				
D1K120155013	B-49-15	11/07/01			12		14		11/19/01	18:55	VOA
		11/0//01	8260B		10		14		11 (17 (0)		
D1K120155014	B-55-17	11/06/01			- •			•	11/17/01	17:19	VOA
			8260B		11		14	•	11/17/01	17.47	WO.
D1K120155015	B-55-3	11/06/01						3.7	11/1//01	17:47	VOA
			8260B		13		14		11/19/01	15.17	VON
D1K120155018	B-45-4	11/08/01	08:50						11/13/01	13.17	VOA
	•		8260B		11		14		11/19/01	19:22	VOA
D1K120155019	B-45-14	11/08/01	09:05						11,13,01	17.22	
•			8260B		11		14		11/19/01	20:17	VOA
D1K120155020	B-45-15	11/08/01	09:15						•		
			8260B		11	:	14	,	11/19/01	14:37	VOA
D1K120155021	B-46-2	11/08/01 (09:35								
			8260B		12	;	14		11/20/01	15:15	VOA
			8260B		12	:	14	,	11/20/01	15:15	VOA

CAMERON-COLE LLC

Wichita, KS

HOLD TIME REPORT

Lab: GCMS VOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif	Ext Hold	Ana Hold	Extraction Date	Analysis Date	Method Description
D1K120155022	B-46-13	11/08/01 0	9:50							
*			8260B		11		14		11/19/01 20:44	VOA
D1K120155023	B-46-17	11/08/01 1	0:00							
			8260B		11		14		11/19/01 15:01	VOA

CAMERON-COLE LLC

Wichita, KS

HOLD TIME REPORT

Lab: GCMS SEMIVOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date		Analysis Date	•	Method Descripti
D1K120155016	B-49-4	11/08/01 08	3:25					-				
			8270C	13	4	14	40	11/21/01	08:30	11/25/01	19:5	9 BNAs
D1K120155017	B-49-15	11/08/01 08	3:35									
			8270C	13	4	14	40	11/21/01	08:30	11/25/01	20:2	2 BNAs

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: METALS

Lab ID #	Well ID	Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date	Analysis Date	Method Description
D1K120155001	B-70-18	11/07/01 11	1:45							
			6010B		11		180	•.	11/18/01 18:31	ICP
			6010B		11		180		11/18/01 18:31	ICP
			7471A		12		28		11/19/01 23:05	

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

		Collection	1	Ext	Ana	Ext	Ana	Extraction	Analysis		Makha d
Lab ID #	Well ID						Hold		Date	·	Method Description
D1K120155001	B-70-18	11/07/01	11:45								
			160.3 MOD		19		99		11/26/01	15:00	
D1K120155002	B-76-4	11/07/01	13:30								
			160.3 MOD		19		99		11/26/01	15:00	
D1K120155003	B-76-16	11/07/01	13:50								
•			160.3 MOD		19		99		11/26/01	15:00	
D1K120155004	B-57-4	11/07/01	14:04								•
			160.3 MOD		19		99		11/26/01	15:00	
D1K120155005	B-57-15	11/07/01	14:20								
			160.3 MOD		19		99		11/26/01	15:00	
D1K120155006	B-58-4	11/07/01	14:45								
			160.3 MOD		19		99		11/26/01	15:00	
D1K120155007	B-58-16	11/07/01	15:00	,					•		
			160.3 MOD		19		99		11/26/01	15:00	
D1K120155008	B-52-4	11/07/01	15:20								
			160.3 MOD		19		99		11/26/01	15:00	
D1K120155009	B-52-15	11/07/01	15:35								
			160.3 MOD		19		99		11/26/01	15:00	
D1K120155010	B-51-4	11/07/01	15:45								
			160.3 MOD		19		99		11/26/01	15:00	
D1K120155011	B-51-15	11/07/01	15:55			•					
			160.3 MOD		19		99		11/26/01	15:00	
D1K120155012	B-49-4	11/07/01	16:20				,				
			160.3 MOD		19		99		11/26/01	15:00	
D1K120155013	B-49-15	11/07/01	16:35						•		
·			160.3 MOD		19		99		11/26/01	15:00	
D1K120155014	B-55-17	11/06/01	16:15								
			160.3 MOD		20		99		11/26/01	15:00	
D1K120155015	B - 55-3		15:30								
			160.3 MOD		20		99		11/26/01	15:00	
D1K120155016	B-49-4										
•			160.3 MOD		18		99		11/26/01	15:00	
D1K120155017	B-49 - 15	11/08/01 0									
			160.3 MOD		18		99		11/26/01	15:00	
D1K120155018	B-45-4	,,									
			160.3 MOD		18		99		11/26/01	15:00	
D1K120155019	B-45-14		09:05								
D1#10015	- 16 ÷		160.3 MOD		18		99		11/26/01	15:00	
D1K120155021	B-46-2		9:35								
D1 1 1 2 0 1 5 5 0 2 2	D 46 33		160.3 MOD		18		99	4	11/26/01	15:00	
D1K120155022	B-40-13	11/08/01 0									106
• *			160.3 MOD		18		99		11/26/01	15:00	

Chain of Custody Record

STL Denver 4955 Yarrow Street Arvada, CO 80002



Severn Trent Laboratories, Inc.

STL-4124 (0700) DEN (0900)																								-			•	•
Client. Safety-Kleen (Wichitn), In Address 2549 North New York Ava City State Zip Wichita KS C	c. Facili	t. Kay	Mana , 7	ager ∫u∫	che	r ((an	ካ <i>ቂ ሲ</i>	ion -	\cdot	le)					•	Dat /	1/8	2/0	,			ì	of Custody		er	
Address 7 5 40 At 10 At		Teleph	one N	lumbe	er (Are	a Coo	de)/Fax	≀ Nun	nber				_					Lab	Num	ber					2.			
City State Zin	Code	303 Site Co	·- 9	38	-35	35	Lab	Conta	3	- 4	30	<u></u>	53	20	0_			hois	/ / * * *	ach li	nt if			Pag	e_2_		f	
Wichita KS K	7219	Russ	al a	Pu	(hn		Ka	ما ال	Ya	d,	,									nee								
Project Name and Location (State)		Carrier	Wayt	oill No	ımber	· ·	, , , , ,			•••		-	\dashv			}		ļ										
														(8)	57								- 1		Specia	l Instr	uction	s/
Contract/Purchase Order/Quote No				М	atrix				conta rese					1826	Metals										Condition	ons of	Recei	pt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	A.r.	Aquedus	Soul		Unpres	H2SO4	HNOS	HCI	NaOH	NaOH		Voc(82669)	Inerg	•												
B-70-18	11/7/01	1145	ľ		lχ		X				İ	1		X	χ													
B-70-18 B-76-194	11/7/01	/330			X		X							X														
B-76 - 16	11/7/01	1350			Χ		X			1				X														
B-57-4	11/7/01	1404	٠		Х		X							X													-	
B-57~15	10/11/11	1420			X	1	X						,	X											<u> </u>			
B-58-4	11/7/01	1445			X	(X							Х					\top									
B-58-16	1117/01	/5ai			λ		X							У														
B-52-4	117/01	1520			<u> </u>	_	X							X											· · ·			
B-52-15	11/7/01	1535			X		X			İ				$ \mathbf{X} $			İ											
B-51-4	11/7/01	1545			X		X							Х														
B-51-15	11/7/01	1555			X		X							X														
			-		-+	╁╾	╁╌┼	-	-	十	\dashv	-+	-	-		-			- -		+		-					
Possible Hazard Identification			1	•	Dispo											•				(A	lee m	av be	asse	ssed	if samples a	re retai	ned	
Non-Hazard	Poison B	Unknown	. [Ret	urn To	Clier			sposi Requi						ive F	or _		_ M	onths	Ìon	ger th	an 3	mont	hs)	•			
	iys 🗌 21 Day	rs 🗌 Oth	er					QC A	vequi.	enn	erns	Ope	City)															
1 Relinquished By 2. Relinquished By 2. Relinquished By		Date ///	9/0	,	Time {	00	,	3	Teive	ed B	VI C	1-	4	2	2	7	-				·			Da //	10/0/	i Tim	130	
2. Relinquistled By		Date	17-		Time			2. Re	ceive	ed B	γ ΄			· v ·									<u>-</u>	Da	- 1 - 1	Tim		
3 Relinquished By		Date			Time			3. Re	ceive	ed B	<u> </u>									-				Da	ite	Tim	ie	
 																						-				Щ		
Borgments Whense Coll Kay Thusther in DISTRIBUTION: WHITE - Stays with the Sample; CANAR	in ediate h	wit	L a	94	/	20+	ertz	'n,	r	•																		
DISTRIBUTION. WHITE - Stays with the Sample; CANAR	r - returnea to Ø	пепі мііп кер	υп, Р	-IIVK	- rieid	~op)	/																					

Chain of Custody Record

STL Denver 4955 Yarrow Street Arvada, CO 80002





Severn Trent Laboratories, Inc.

STL-4124 (0700) DEN (0900)																							,
Safety Kken Wichita 1 Address	Facility	Project K	Manage C1`/	Tau nber (Ar	sch	70	(0	gm.	AD.	n · (cie	· L	LC)	Da	te //	18/0			Cha	ain of C		Number	-
2549 N. Now York AVE	•	Telepho	one Nun	nber (Ar RK- K	ea Cod	le)/Fax	Numb	er - 4	2 <i>ii</i>	- 1-1	-,7	ر-		La	b Num	ber				<u> </u>	3		6
Vichity State Zip	Code	Site Co	ntact	18- 5		Lab C	Contac	1 ,	20	<u> 75</u>				Analysi					Pa	ge		_ of	_6
Project Name and Location (State)	67219	Carnor	₹/ Waybill	Dunber Number	<u>n</u>		140		100	der	_ \K	12		ore spa	ace is	need	ed)	٦.	H				
S-K Wichita Facility, W Contract/Purchase Order/Quote No	ichira KS										87601	Wetry	(2)							Si	necial	Instruc	ctions/
Contract/Purchase Order/Quote No	•	-,	,	Matrix				ntaine serva			73	'l i	1 S							· Co	nditio	ns of F	Receipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Agueous	Sed	100	Unpres	H2SO4 HNOS	нСі	NaOH	ZnAc/ NaOH	β	RCRA	e) phy										
B-44-4	11/7/01	1020				X		\Box			X	-				1		1					
B-49-15	11/7/01	1635)	χ	X					X	_				1.							
B-55-17	11/6/01	1615)		X					χ			17	\top	1			\Box		· · · · · ·		
B-55-3	11/6/01	1530)		χ					Īχ			11	1	1 1		+-	\Box				
13-49-4		08 25)	(x					 `		X		1	\Box	1	-	\Box				
B-49-15	11/8/01	0835				X				1	1		$\frac{\lambda}{\lambda}$			1-1	7	┪					
B-45-4	11/8/01 0	1850		 		X					X			11	+	+1	-						 ,
B-48-14	11/8/01 0	1905		7		X					X			11	_			_				-	
B-45-15	11/8/01	1915	X					X		<u> </u>	X		_		-	1 1	_						······
B-46-2	4.4	1935		X	1	X					V		\dashv	1-1	╁	$\dagger \dagger$							
B-46-13	11/8/01 0	1950		د		χ				1	$\hat{\chi}$		7		-	+		-					
B-46-17	11/8/01	1500	$\sqrt{\chi}$				1	X		\neg	X		+	+ +	_	+		+	\vdash			-	
Possible Hazard Identification			1 '	le Dispo				<u>r </u>			_1, \			<u>.l.</u> l.	i	(A te	e mau	he ass		l if same	olon ara	retained	
Non-Hazard	Poison B	Unknown	∫∐ R	eturn To	Client			osal B		(Speci		ive F	or	м	onths	long	er thai	n 3 mor	nths)		0103 a16	retairiet	
24 Hours	ys 🔲 21 Days	Othe	r			_ _	0 1104	-	0/110	COPCU	'97		,										ř
1 Relinquished By U. Puittell		Date 11/8	101	Time /8	W	′ (ivad B	~]/	1 G	<u> </u>	Un	S		4					ate /10)/d	Time 79	30
2. Relinquished By		Date		Time	š	2	Rece	ived B	У			,								ate		Time	
3. Relinquished By		Date		Time		3	Rece	ived B	у				-						l D	ate		Time	
Ebriments Plant Call Vay 1		<u> </u>		٠.														· · · · · · · · · · · · · · · · · · ·					···········
DISTRIBUTION: CON LCV TO Stays with the Sample; CANARY	CHSENCY	nt with Rend	nedia	ente/	Coor	M	<u>h</u>	o	m	<u>/</u>	96	165	110	ns.									

STL Denver 4955 Yarrow Street Arvada, CO 80002 J13 C 5.0 C

SEVERN TRENT SERVICES

1 2 8

Severn Trent Laboratories, Inc.

STL-4124 (0700) DEN (0900)																		,										
Client Syfety-Kleen (Wich: M.) Inc. Address 2549 North New York Aven City Wich: The State KS Project Name and Location (State) SK Wich: The Facility, Wich: The Contract/Purchase Order/Quote No.	Facilit	Project Telephe	Mani K1	nger	Ta	vicl	ı er	(Car	ا جداء	in	- (اند)	· e /)			Date	" /	13,	/ 0 /				n of Custody 0 4 1 1			
Address	1900.79	Telepho	one N	lumb	er (A	rea Co	de)'F	ax M	umber	r								Lab	Nun	iber					i)	
2549 North New York Aven	i/e	303	43	38-	- 5	53	5	/ 3	303		93	ÿ -	5	12	0			<u> </u>						Pag	je	of .	<u> </u>	=
Wichitz State Zip	_{Code} 57219	Russ	ntact L	1) U:1	' 1	K	i Con	ntact	60	le,	۸						ilysis e spa				T 1	ГТ					
Project Name and Location (State)	Ks	Carrier	Way	bill N	umbe	er								000	2.5	ű									Specia	l Instruc	tions/	
Contract/Purchase Order/Quote No.	, , , , , , , , , , , , , , , , , , , ,						T		Cont	laine	rs R			3	3	3				1					Conditio	ons of R	eceipt	
1205-2			Ĺ.,	<i>N</i>	fatrix	·			Pres	erva	live			E	2, 3,	9	į											
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Time	אני	Agueous		Soil	Urpres	H.3SO	HINOS	нСі	NaOH	Z.:Ac NaO+		X VGC (F1606)	7.00	7								_				_
B-68-4		0815				X	3	_					_	X	X	X			╡.	_	_		\sqcup					
B-68-16	11/12/01	0930				X	1		<u> </u>						X	<u>X</u>	\perp		_	_ _		-	\sqcup	_	· · · ·			
B-68-19	1-7-1	0845		X				ļ		3				X			_		_	-	_	ļ	\sqcup					
B-69-3	11/12/01	1100				X	2	_	<u> </u>					X	X				_									. *
B-69-15	11/12/4	1115				X	2	-						X	X		_				_				•			
B-77-5	11/12/61	1200				X	1							X														
B-77-16	11/12/01	1215				X	1							X							_			\perp	<u> </u>			
B-77-19	11/12/01	1220		X					<u> </u>	3				X					╛.		<u> </u>							
B 59-3	11/12/61	1330				X	1							X	-				╝.		<u> </u>					· · · · · ·	•	
B-59-15	11/12/01	1410				X	1		<u> </u>					Х							<u> </u>				· 		~	
B-105-16	11/12/01	1300				X	1								X	X						<u> </u>					<u>_</u>	
B-107-3	11/12/07	1400				X	1							X														
Possible Hazard Identification			S	Samp	le Di	sposal														(A	lee i	nay be	e ass	essea	ıf samples a	re retained	1	
Non-Hazard	Poison B	Unknow	n [□ R	eturn	To Che	ent		Dispo		•				ive f	or _			onth:	s lo	nger	than 3	3 mon	iths)				
Turn Around Time Required								OC	C Req	uirei	nent.	s (Sp	ocify)	1														
☐ 24 Hours ☐ 7 Days 14 D	ays 🔲 21 Da	ys 🗌 O	her_																									
1. Relinquished by 2. Relinquished by		Date /	3/	ej .	Tir	ne / Q : a	ษ	1.	Rece Rece	ived	Ву		TO) ;	ι	1	5								ale	Time		
2. Relinquished by		Date			T"	ne		2.	Rece	lved Zu	By - 2	_		N	1,	31	s A	1		•,				\int_{a}^{b}	ate 1//4/81 ate	Time /6/	ſ.	
3. Relinquished By		Date			Tir	ne		3.	Rece	ived	Ву							1							ale	Time		
comments); On V	,	/)			<u>.</u>					-																		
DISTRIBUTION WHITE - Stays with the Sample: CANAF	Cher With	K An C	600 C	PIN	HUT	eld Co	nuit	_													_		· ·					
2.5 Tubo Ti	or a comment to t	SHORT WILLIAM	٠,,,			00	17																			_		



STL Denver

4955 Yarrow Street Arvada, CO 80002-4517

Tel: 303 736 0100 Fax: 303 431 7171 www.stl-inc.com

ANALYTICAL REPORT REVISED

SAFETY KLEEN (WICHITA, KS)

Lot #: D1K150281

Kay Tauscher

Cameron-Cole LLC 5777 Central Avenue, Suite 100 Boulder, CO 80301

> cc: Will Huskie cc: John Arbuthnot

SEVERN TRENT LABORATORIES, INC.

Kae E. Yoder Project Manager

January 15, 2002

This report shall not be reproduced except in full, without the written approval of the laboratory

Table Of Contents

Standard Deliverables

Report Contents

Total Number of Pages

Standard Deliverables

The Cover Letter and the Report Cover page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.

110

- Table of Contents
- Case Narrative
- Executive Summary Detection Highlights
- Methods Summary
- Method/Analyst Summary
- Lot Sample Summary
- Analytical Results
- QC Data Association Summary
- Hold Time Report
- Chain-of-Custody

CASE NARRATIVE

REVISE

Client Name:

Safety-Kleen (Wichita)

Project Name: Project Number:

Sample Delivery Group: Original Narrative Date: D1K150281 12/06/01

Revised Narrative Date:

01/15/02

Sample Receipt

Nineteen solid samples, and five water samples, submitted by Safety-Kleen (Wichita), Inc., were received by STL Denver on November 14, 2001, according to documented sample acceptance procedures. The samples were received intact at temperatures of 5.3°C and 5.8°C. Analyses requested on the associated chains-of-custody are as follows: GC/MS Volatiles, GC/MS Semivolatiles and Total Metals. No anomalies were encountered during sample receipt.

GC/MS Volatiles

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	Parameter	Detection	RL	Units
B-68-4	1,1-Dichloroethane	23	5.0	ug/kg
	cis-1,2-Dichloroethene	6.4	2.5	ug/kg
4	Ethylbenzene	19	5.0	ug/kg
	1,2,4-Trimethylbenzene	6.0	5.0	ug/kg
	m-Xylene & p-Xylene	110	2.5	ug/kg
	o-Xylene	32	2.5	ug/L
B-68-19	cis-1,2-Dichloroethene	140	5.0	ug/L
	Ethylbenzene	• 10	5.0	ug/L
	Tetrachloroethene	29	5.0	ug/L
	1 Toluene	8.2	5.0	ug/L
	1,1,1-Trichloroethane	! 39	5.0	ug/L
	Trichloroethene	22	5.0	ug/L
	o-Xylene	21	5.0	ug/L
	m-Xylene & p-Xylene	54	10	ug/L
B-77-5	1.1-Dichloroethane	6.3	5.0	ug/kg
B-77-19	1.1-Dichloroethane	8.9	1.0	ug/L
	Toluene	1.1	1.0	ug/L
	1.1.1-Trichloroethane	2.7	1.0	ug/L
B-59-3	, n-Butylbenzene	8.6	5.0	ug/kg
	sec-Butylbenzene	18	5.0	ug/kg
	tert-Butylbenzene	12	5.0	ug/kg
·	Ethylbenzene	46	5.0	ug/kg
	Isopropylbenzene	11	5.0	ug/kg
	p-Isopropyltoluene	8.1	5.0	ug/kg
	n-Propylbenzene	30	5.0	ug/kg
	: Toluene	6.5	5.0	ug/kg
	1,2,4-Trimethylbenzene	70	5.0	ug/kg
	m-Xylene & p-Xylene	27	2.5	ug/kg
	o-Xylene	6.1	2.5	ug/kg
B-107-3	Tetrachloroethene	9.4	5.0	ug/kg
B-63-0.5	Tetrachloroethene	24	5.0	ug/kg
B-63-11	Tetrachloroethene	11000	490	ug/kg
	1,1,1-Trichloroethane	1000	490	ug/kg
	Trichloroethene	590	490	ug/kg :

Sample ID	Parameter	Detection	RL	Units
B-63-20	1,1-Dichloroethane	2.5	2.0	ug/L
	Tetrachloroethene	32	2.0	ug/L
	1,1,1-Trichloroethane	9.0	2.0	ug/L
B-80-17	Benzene	1.6	1.0	ug/L
	1,1-Dichloroethane	33	1.0	ug/L
	cis-1,2-Dichloroethene	2.1	1.0	ug/L
	trans-1,2-Dichloroethene	3.0	0.50	ug/L
	Ethylbenzene	1.7	1.0	ug/L
	o-Xylene	1.8	1.0	ug/L
	m-Xylene & p-Xylene	14	2.0	ug/L
B-83-17	1,1-Dichloroethane	44	20	ug/L
	Ethylbenzene	120	20	ug/L
	Toluene	39	20	ug/L
	o-Xylene	190	20	ug/L
	m-Xylene & p-Xylene	310	40	ug/L

- > The samples were analyzed within holding time and without incident, with the exception of the following items noted.
- Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. In some cases, due to matrix interference or analytes present above the linear calibration curve, samples had to be analyzed at a dilution. In addition, sample B-63-11 had to be analyzed using the medium-level methanol preparation procedure. For samples analyzed at a dilution, the reporting limits have been adjusted relative to the preparation performed and dilutions required. The following table details the associated dilutions.

Sample ID	¹ Dilution
B-68-19	1:5
B-63-11	1:1.95
B-63-20	1:2
B-83-17	1:20

- Sample B-63-0.5 exhibited internal standard 1,4-Dichlorobenzene-d4 outside the QC control limits. Upon repreparation and reanalysis, the internal standard outlier was still present, confirming that this anomaly is most likely due to matrix interference. The original analysis data has been reported.
- > Client specific, as well as, standard batch MS/MSDs have been provided. All spike parameters were within QC control limits, with the exception of the items noted in the following table. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data: therefore, corrective action is deemed unnecessary.

	QC Batch/	MS	MSD	Recovery		RPD
Parameter	Specific Sample	%Rec	%Rec	Limits	RPD	Limits
Trichloroethene	QC Batch 1325275	88	77	81-121	3.0	0-20

GC/MS Semivolatiles

Sample analysis did not reveal any detected target analytes at or above Safety-Kleen (Wichita)'s RLs, with the exception of the items noted in the following table.

Sample ID	! Parameter	Detection	RL	· Units
B-68-16	bis (2-Ethylhexyl) phthalate	630	330	ug/kg
B-105-16	bis (2-Ethylhexyl) phthalate	650	330	ug/kg

> The samples were analyzed within holding time and without incident.

Total Metals

Sample analysis revealed detectable concentrations at or above Safety-Kleen (Wichita)'s RLs, as detailed in the Executive Summary-Detection Highlights Report. The samples were analyzed within holding time and without incident.

Revisions

The revisions included in this report are as follows:

- 1. GC/MS Semivolatiles Additional compounds, bis (2-Ethylhexyl) phthalate and Dimethyl phthalate, have been reported for samples B-68-4, B-68-16 and B-105-16, as requested.
- 2. GC/MS Semivolatiles As requested, the laboratory looked for any detectable concentrations present above the method detection limit (MDL) but below the reporting limit. None were found. The MDLs have been printed on the analytical data pages.

These data and reporting limits are being used specifically to meet the needs of this project. All RLs are supported by STL Denver's Method Detection Limits (MDLs). Reporting limits in this report are at or above the MDL.

I certify that the data presented in this report are accurate, complete, and meets the minimum quality assurance standards in 40-CFR 136, 40-CFR 141, and/or SW846. The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. An assessment of the quality of the data, noting any exceptions, outliers, and/or problems encountered have been narrated herein.

Kae É. Yoder

Project Manager

EXECUTIVE SUMMARY - Detection Highlights

D1K150281

			REPORTING		ANALYTICAL
	PARAMETER	RESULT	LIMIT	UNITS	METHOD
B-68-4	11/12/01 08:15 001				
	Arsenic	5.5	1.0	mg/kg	SW846 6010B
	Lead	10.4	0.80	mg/kg	SW846 6010B
	Barium	165	1.0	mg/kg	SW846 6010B
	Chromium	21.3	1.0	mg/kg	SW846 6010B
	1,1-Dichloroethane	23	5.0	ug/kg	SW846 8260B
	cis-1,2-Dichloroethene	6.4	2.5	ug/kg	SW846 8260B
	Ethylbenzene	19	5.0	ug/kg	SW846 8260B
	1,2,4-Trimethylbenzene	6.0	5.0	ug/kg	SW846 8260B
	m-Xylene & p-Xylene	110	2.5	ug/kg	SW846 8260B
	o-Xylene	32	2.5	ug/kg	SW846 8260B
	Percent Moisture	19.7	0.10	8	MCAWW 160.3 MOD
B-68-1	6 11/12/01 08:30 002				
	Lead	2.2	0.80	mg/kg	SW846 6010B
	Barium	30.1	1.0	mg/kg	SW846 6010B
	Chromium	2.4	1.0	mg/kg	SW846 6010B
	bis(2-Ethylhexyl)	630	330	ug/kg	SW846 8270C
	phthalate		330	43/12	5.010 02.00
	Percent Moisture	7.4	0.10	양	MCAWW 160.3 MOD
B-68-19	9 11/12/01 08:45 003				
	cis-1,2-Dichloroethene	140	5.0	ug/L	SW846 8260B
	Ethylbenzene	10	5.0	ug/L	SW846 8260B
	Tetrachloroethene	29	5.0	ug/L	SW846 8260B
	Toluene	8.2	5.0	ug/L	SW846 8260B
	1,1,1-Trichloroethane	39 .	5.0	ug/L	SW846 8260B
	Trichloroethene	22	5.0	ug/L	SW846 8260B
	o-Xylene	21	5.0	ug/L	SW846 8260B
	m-Xylene & p-Xylene	54	10	ug/L	SW846 8260B
B-69-3	11/12/01 11:00 004				
	Arsenic	5.5	1.0	mg/kg	SW846 6010B
	Lead	11.3	0.80	mg/kg	SW846 6010B
	Barium	190	1.0	mg/kg	SW846 6010B
	Chromium	23.0	1.0	mg/kg	SW846 6010B
• •	Percent Moisture	22.0	0.10	⁸	MCAWW 160.3 MOD

EXECUTIVE SUMMARY - Detection Highlights

D1K150281

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
B-69-15 11/12/01 11:15 005				
2 0 13 11,12,01 11.13 003			-	
Arsenic	2.2	1.0	mg/kg	SW846 6010B
Lead	4.6	0.80	mg/kg	SW846 6010B
Barium	34.5	1.0	mg/kg	SW846 6010B
Chromium	7.5	1.0	mg/kg	SW846 6010B
Percent Moisture	15.2	0.10	ક	MCAWW 160.3 MOD
B-77-5 11/12/01 12:00 006	•			e e e e e e e e e e e e e e e e e e e
1,1-Dichloroethane	6.3	5.0	ug/kg	SW846 8260B
Percent Moisture	21.1	0.10	8	MCAWW 160.3 MOD
B-77-16 11/12/01 12:15 007		:	,	
Percent Moisture	8.4	0.10	%	MCAWW 160.3 MOD
B-77-19 11/12/01 12:20 008	· · · · · · · · · · · · · · · · · · ·		÷	
1,1-Dichloroethane	8.9	1.0	ug/L	SW846 8260B
Toluene	1.1	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	2.7	1.0	ug/L	SW846 8260B
B-59-3 11/12/01 13:30 009				
	•			
n-Butylbenzene	8.6	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	18	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	12	5.0	ug/kg	SW846 8260B
Ethylbenzene	46	5.0	ug/kg	SW846 8260B
Isopropylbenzene	11	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	8.1	5.0	ug/kg	SW846 8260B
n-Propylbenzene	30	5.0	ug/kg	SW846 8260B
Toluene	6.5	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	70	5.0 .	ug/kg	SW846 8260B
m-Xylene & p-Xylene	27	2.5	ug/kg	SW846 8260B
o-Xylene	6.1	2.5	ug/kg	SW846 8260B
Percent Moisture	22.3	0.10	ે	MCAWW 160.3 MOD
B-59-15 11/12/01 14:10 010				
Percent Moisture	9.4	0.10	ତ	MCAWW 160.3 MOD

EXECUTIVE SUMMARY - Detection Highlights

D1K150281

•	,	•		1	
			REPORTING	W _k *	ANALYTICAL
	PARAMETER	RESULT	LIMIT	UNITS	METHOD
•					•
B-105	-16 11/12/01 13:00 011			•	
:	Arsenic	1.1	1.0	mg/kg	SW846 6010B
	Lead	2.4	0.80	mg/kg	SW846 6010B
	Barium	18.6	1.0	mg/kg	SW846 6010B
	Chromium	3.1	1.0	mg/kg	SW846 6010B
	bis(2-Ethylhexyl)	650	330	ug/kg	SW846 8270C
	phthalate	. 030	250	ug/ng	BN040 02700
	Percent Moisture	7.4	0.10	%	MCAWW 160.3 MOD
B-107	-3 11/12/01 14:00 012				
2 20,	21, 12, 01 11.00 012				
	Tetrachloroethene	9.4	5.0	ug/kg	SW846 8260B
	Percent Moisture	24.6	0.10	ે	MCAWW 160.3 MOD
B-108	-16 11/12/01 12:15 013	•			
	Percent Moisture	4.3	0.10	%	MCAWW 160.3 MOD
B-63-0	0.5 11/12/01 14:10 014				
•	Arsenic	11.0	1.0	mg/kg	SW846 6010B
	Cadmium	2.4	0.50	mg/kg	SW846 6010B
	Lead	1020	0.80	mg/kg	SW846 6010B
	Barium	226	1.0	mg/kg	SW846 6010B
	Chromium	51.0	1.0	mg/kg	SW846 6010B
	Tetrachloroethene	24	5.0	ug/kg	SW846 8260B
	Percent Moisture	10.9	0.10	§	MCAWW 160.3 MOD
B-63-3	l1 11/12/01 14:20 015		•	í	
	Arsenic	4.1	. 1.0	mg/kg .	SW846 6010B
	Lead	69.3	0.80	mg/kg	SW846 6010B
	Barium	178	1.0	mg/kg	SW846 6010B
	Chromium	19.8	1.0	mg/kg	SW846 6010B
	Tetrachloroethene	11000	490	ug/kg	SW846 8260B
	1,1,1-Trichloroethane	1000	490	ug/kg	SW846 8260B
	Trichloroethene	590	490		
•	Percent Moisture			ug/kg	SW846 8260B
	referre Moiscule	29.6	0.10	%	MCAWW 160.3 MOD
B-63-1	9 11/12/01 14:30 016				•
	Arsenic	1.5	1.0	mg/kg	SW846 6010B
	Lead	2.3	0.80	mg/kg	SW846 6010B
	Barium	22.5	1.0	mg/kg	SW846 6010B

EXECUTIVE SUMMARY - Detection Highlights

D1K150281

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
	· · · · · · · · · · · · · · · · · · ·			ų
B-63-19 11/12/01 14:30 016				
Chromium	1.6	1.0	mg/kg	SW846 6010B
Percent Moisture	10.0	0.10	%	MCAWW 160.3 MOD
B-63-20 11/12/01 14:35 017			•	,
1,1-Dichloroethane	2.5	2.0	ug/L	SW846 8260B
Tetrachloroethene	32	2.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	9.0	2.0	ug/L	SW846 8260B
B-80-1 11/12/01 14:55 018				
Percent Moisture	3.9	0.10	Ŷ	MCAWW 160.3 MOD
B-80-15 11/12/01 15:05 019		•		
Percent Moisture	11.9	0.10	%	MCAWW 160.3 MOD
B-80-17 11/12/01 15:10 020				
Benzene	1.6	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	33	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	2.1	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	3.0	0.50	ug/L	SW846 8260B
Ethylbenzene	1.7	1.0	ug/L	SW846 8260B
o-Xylene	1.8	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	14	2.0	ug/L	SW846 8260B
B-83-1 11/12/01 15:45 021		•		
Percent Moisture	20.2	0.10	&	MCAWW 160.3 MOD
B-83-15 11/12/01 15:55 022	,			
Percent Moisture	8.8	0.10	૪	MCAWW 160.3 MOD
B-83-17 11/12/01 16:05 023				
1,1-Dichloroethane	44	20,	ug/L	SW846 8260B
Ethylbenzene	120	20	ug/L	SW846 8260B
Toluene	39	20	ug/L	SW846 8260B
o-Xylene	190	20	ug/L	SW846 8260B
m-Xylene & p-Xylene	310	40	ug/L	SW846 8260B
- · · · · .	•		5 , · ,	

EXECUTIVE SUMMARY - Detection Highlights

D1K150281

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
B-109-15 11/12/01 16:00 024		-		
· Percent Moisture	4.3	0.10	8	MCAWW 160.3 MOD

METHODS SUMMARY

D1K150281

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD		
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B		
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A		
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD		
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B		
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B		
Volatile Organics by GC/MS	SW846 8260B	SW846 5030		
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826		
Volatile Organics by GC/MS	SW846 8260B	SW846 5035		

References:

MCAWW	"Methods for Chemical Analysis of Water and Wastes",
	EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

D1K150281

ANALYTICAL METHOD	ANALYST	ANALYST ID
	"	
MCAWW 160.3 MOD	Nathan Lovstad	000090
SW846 6010B	Lynn-Anne Trudell	006645
SW846 7471A	Thomas Lill	006929
SW846 8260B	Dan Appelhans	001008
SW846 8260B	Mark McDaniel	000998
SW846 8260B	Mike Armstrong	002544
SW846 8270C	Xiayasang Leewaphath	006600
References:		* *
	l Analysis of Water and Wastes", rch 1983 and subsequent revisions.	
	aluating Solid Waste, Physical/Chem ion, November 1986 and its updates.	ical

SAMPLE SUMMARY

D1K150281

WO #	SAMPLE#	CLIENT S	AMPLE	ID						SAMPLED DATE	SAMP TIME
EN3AJ	001	B-68-4									
EN3A0									 •	11/12/01	
	002	B-68-16								11/12/01	
EN3CM	003	B-68-19			-					11/12/01	
EN3CP	004	B-69-3								11/12/01	11:00
EN3CW	005	B-69-15					-			11/12/01	11:15
EN3C0	006	B-77-5								11/12/01	12:00
EN3C1	007	B-77-16			•					11/12/01	12:15
EN3C4	800	B-77-19	ť							11/12/01	12:20
EN3C5	009	B-59-3				•				11/12/01	
EN3C6	010	B-59-15								11/12/01	
EN3C7	011	B-105-16								11/12/01	
EN3C8	012	B-107-3								11/12/01	
EN3DE	013	B-108-16					:			11/12/01	
EN3DG	014	B-63-0.5								11/12/01	
EN3DQ	015	B-63-11			٠					11/12/01	
EN3DR	016	B-63-19			•		, .	er.	. *	11/12/01	
EN3DV	017	B-63-20			• .					11/12/01	
EN3D0	018	B-80-1				,				11/12/01	
EN3D4	019	B-80-15								11/12/01	
EN3D6	020	B-80-17		d						11/12/01	
EN3D7	021	B-83-1						•		11/12/01	
EN3EA	022	B-83-15				•				11/12/01	
EN3EC	023	B-83-17								11/12/01	
EN3EE		B-109-15	* .					,		11/12/01	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Client Sample ID: B-68-4

GC/MS Volatiles

Lot-Sample #...: D1K150281-001 Work Order #...: EN3AJ1AA Matrix.....: SOLID

Date Sampled...: 11/12/01 08:15 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 11:58

Dilution Factor: 1

% Moisture....: 20 **Method.....:** SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	23	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	6.4	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	19	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-68-4

Lot-Sample #: D1K150281-001	Work Order #: EN3AJ1AA	Matrix SOLID
-----------------------------	------------------------	--------------

		REPORTING	• •
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND .	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND ,	5.0	ug/kg
Tetrachloroethene ,	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	6.0	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND _	5.0	ug/kg
m-Xylene & p-Xylene	110	2.5	ug/kg
o-Xylene	32	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	115	(80 - 120)	
1,2-Dichloroethane-d4	112	(79 - 125)	
4-Bromofluorobenzene	103	(71 - 132)	
Toluene-d8	94	(77 - 117)	

Client Sample ID: B-68-19

GC/MS Volatiles

Lot-Sample #...: D1K150281-003 Work Order #...: EN3CM1AA Matrix.....: WATER

 Date Sampled...:
 11/12/01 08:45
 Date Received...:
 11/14/01

 Prep Date.....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325275
 Analysis Time...:
 14:08

Dilution Factor: 5

Method.....: SW846 8260B

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	10	ug/L
n-Butylbenzene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
tert-Butylbenzene	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
Chlorobenzene	ND .	5.0	ug/L
Chlorodibromomethane	ND	5.0	ug/L
Chloroethane	ND	10	ug/L
Chloroform	ND	5.0	ug/L
Chloromethane .	ND	10	ug/L
2-Chlorotoluene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
Dichlorodifluoromethane	ND	10	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
cis-1,2-Dichloroethene	140	5.0	ug/L
trans-1,2-Dichloroethene	ND	2.5	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
1,3-Dichloropropane	ND	5.0	ug/L
2,2-Dichloropropane	ND	25	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
Ethylbenzene	10	5.0	ug/L
Trichlorofluoromethane	ND	10	ug/L
Hexachlorobutadiene	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
p-Isopropyltoluene	ND	5.0	ug/L
Methylene chloride	ND	5.0	ug/L
Naphthalene	ND .	5.0	ug/L

Client Sample ID: B-68-19

GC/MS Volatiles

Lot-Sample #: D1K150281-00	Work Order #	: EN3CM1AA	, Matrix WATER
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	5.0	ug/L
Styrene	ND ·	5.0	ug/L
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
Tetrachloroethene	29	5.0	ug/L
Toluene	8.2	5.0	ug/L
1,2,3-Trichlorobenzene	ND	5.0	ug/L
1,2,4-Trichloro-	ND .	5.0	ug/L
benzene			
1,1,1-Trichloroethane	39	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
Trichloroethene	22	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
Vinyl chloride	ND	5.0	ug/L
o-Xylene	21	5.0	ug/L
m-Xylene & p-Xylene	54	10	ug/L
1,2-Dibromo-3-	ND	10	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/L
	-		
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	105	(80 - 120)	- ,
1,2-Dichloroethane-d4	109	(72 - 127)	
4-Bromofluorobenzene	95	(79 - 119)	
m - 1 10		/·	

(79 - 119)

110

Toluene-d8

Client Sample ID: B-69-3

GC/MS Volatiles

Lot-Sample #...: D1K150281-004 Work Order #...: EN3CP1AA Matrix.....: SOLID

 Date Sampled...:
 11/12/01
 11:00
 Date Received...:
 11/14/01

 Prep Date.....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325482
 Analysis Time...:
 13:16

Dilution Factor: 1

% Moisture....: 22 Method.....: SW846 8260B

REPORTING RESULT			•	
Benzene ND 5.0		•	REPORTING	
Bromobenzene ND	PARAMETER	RESULT	LIMIT	UNITS
Bromochloromethane	Benzene	ND	5.0	ug/kg
Bromodichloromethane		ND	5.0	ug/kg
Bromoform ND 5.0		ND	5.0	ug/kg
### Bromomethane ND 10	Bromodichloromethane	ND	5.0	ug/kg
n-Butylbenzene ND 5.0 ug/kg sec-Butylbenzene ND 5.0 ug/kg tert-Butylbenzene ND 5.0 ug/kg Carbon tetrachloride ND 5.0 ug/kg Chlorobenzene ND 5.0 ug/kg Chlorodibromomethane ND 5.0 ug/kg Chlorotethane ND 10 ug/kg Chloroform ND 10 ug/kg Chlorotoluene ND 5.0 ug/kg 2-Chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- chloropropane (DBCP) ND 10 ug/kg 1,2-Dibromoethane (EDB) ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dic	Bromoform	ND	5.0	ug/kg
sec-Butylbenzene ND 5.0 ug/kg tert-Butylbenzene ND 5.0 ug/kg Carbon tetrachloride ND 5.0 ug/kg Chlorobenzene ND 5.0 ug/kg Chlorodibromomethane ND 5.0 ug/kg Chlorotethane ND 10 ug/kg Chloroform ND 10 ug/kg Chlorotethane ND 5.0 ug/kg 2-Chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- ND 10 ug/kg 1,2-Dibromoethane (DBCP) 10 ug/kg 1,2-Dibromoethane ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichloroethane ND 5.0 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethene	Bromomethané	ND	10	ug/kg
tert-Butylbenzene ND 5.0 ug/kg Carbon tetrachloride ND 5.0 ug/kg Chlorobenzene ND 5.0 ug/kg Chlorodibromomethane ND 5.0 ug/kg Chlorodethane ND 10 ug/kg Chloroform ND 10 ug/kg Chloromethane ND 10 ug/kg 2-Chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- ND 10 ug/kg 1,2-Dibromoethane (EDB) ND 5.0 ug/kg 1,4-Dichlorobenzene (EDB) ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichloroethane ND 5.0 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2	n-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride ND 5.0 ug/kg Chlorobenzene ND 5.0 ug/kg Chlorodibromomethane ND 5.0 ug/kg Chloroethane ND 10 ug/kg Chloroform ND 10 ug/kg Chloromethane ND 10 ug/kg Chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- ND 10 ug/kg chloropropane (DBCP) 0 ug/kg ug/kg 1,2-Dibromoethane (EDB) ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichloroethane ND 5.0 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene	sec-Butylbenzene	ND	5.0	ug/kg
Chlorobenzene ND 5.0 ug/kg Chlorodibromomethane ND 5.0 ug/kg Chloroethane ND 10 ug/kg Chloroform ND 10 ug/kg Chloromethane ND 10 ug/kg 2-Chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- ND 10 ug/kg 1,2-Dibromo-3- ND 5.0 ug/kg 1,2-Dibromoethane (EDB) ND 5.0 ug/kg Dibromomethane (EDB) ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane	tert-Butylbenzene	ND	5.0	ug/kg
Chlorobenzene ND 5.0 ug/kg Chlorodibromomethane ND 5.0 ug/kg Chloroethane ND 10 ug/kg Chloroform ND 10 ug/kg Chloromethane ND 10 ug/kg 2-Chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- ND 10 ug/kg 1,2-Dibromo-3- ND 5.0 ug/kg 1,2-Dibromoethane (EDB) ND 5.0 ug/kg 1,2-Dibromoethane (EDB) ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichloroethane ND 5.0 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane	Carbon tetrachloride	ND	5.0	ug/kg
Chlorodibromomethane ND 5.0 ug/kg Chloroethane ND 10 ug/kg Chloroform ND 10 ug/kg Chloromethane ND 10 ug/kg 2-chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- ND 10 ug/kg chloropropane (DBCP) ND 5.0 ug/kg 1,2-Dibromoethane (EDB) ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichloroethane ND 5.0 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethene ND 5.0 ug/kg 1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 2.5 ug/kg 1,1-Dichloropropane ND 5.0 ug/kg 1,2-Dichloropropane </td <td>Chlorobenzene</td> <td>ND</td> <td>5.0</td> <td></td>	Chlorobenzene	ND	5.0	
Chloroethane ND 10 ug/kg Chloroform ND 10 ug/kg Chloromethane ND 10 ug/kg 2-Chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- ND 10 ug/kg chloropropane (DBCP) ND 5.0 ug/kg 1,2-Dibromoethane (EDB) ND 5.0 ug/kg Dibromomethane (EDB) ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichloroethane ND 5.0 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethene ND 5.0 ug/kg 1,2-Dichloroethene ND 5.0 ug/kg 1,2-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg	Chlorodibromomethane	ND	5.0 '	
Chloroform ND 10 ug/kg Chloromethane ND 10 ug/kg 2-Chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- ND 10 ug/kg chloropropane (DBCP) ND 5.0 ug/kg 1,2-Dibromoethane (EDB) ND 5.0 ug/kg Dibromomethane (EDB) ND 5.0 ug/kg 1,4-Dichlorobenzene ND ND 5.0 ug/kg 1,2-Dichlorobenzene ND ND 5.0 ug/kg 1,3-Dichloroethane ND 10 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 2.5 ug/kg 1,1-Dichloropropane ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg	Chloroethane	· ND	10	
Chloromethane ND 10 ug/kg 2-Chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- chloropropane (DBCP) ND 10 ug/kg 1,2-Dibromoethane (EDB) ND 5.0 ug/kg Dibromomethane ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichlorobenzene ND 5.0 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethene ND 2.5 ug/kg trans-1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 2,2-Dichloropropane ND 5.0 ug/kg	Chloroform .	ND	10	
2-Chlorotoluene ND 5.0 ug/kg 4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- ND 10 ug/kg chloropropane (DBCP) 1,2-Dibromoethane (EDB) ND 5.0 ug/kg Dibromomethane ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichlorothane ND 10 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethene ND 5.0 ug/kg 1,2-Dichloroethene ND 5.0 ug/kg 1,2-Dichloroethene ND 5.0 ug/kg 1,2-Dichloroethene ND 5.0 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,3-Dichloropropane ND 5.0 ug/kg 1,3-Dichloropropane ND 5.0 ug/kg 2,2-Dichloropropane ND 5.0 ug/kg	Chloromethane	ND	10	
4-Chlorotoluene ND 5.0 ug/kg 1,2-Dibromo-3- ND 10 ug/kg chloropropane (DBCP) ND 5.0 ug/kg 1,2-Dibromoethane (EDB) ND 5.0 ug/kg Dibromomethane ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichloroethane ND 5.0 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 2.5 ug/kg 1,1-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 1,3-Dichloropropane ND 5.0 ug/kg	2-Chlorotoluene	ND	5.0	
1,2-Dibromo-3- chloropropane (DBCP) 1,2-Dibromoethane (EDB) ND Dibromomethane ND S.0 ug/kg 1,4-Dichlorobenzene ND S.0 ug/kg 1,2-Dichlorobenzene ND S.0 ug/kg 1,3-Dichlorobenzene ND S.0 ug/kg 1,1-Dichloroethane ND S.0 ug/kg 1,2-Dichloroethane ND S.0 ug/kg 1,1-Dichloroethane ND S.0 ug/kg 1,1-Dichloroethane ND S.0 ug/kg 1,2-Dichloroethane ND S.0 ug/kg 1,2-Dichloroethene ND S.0 ug/kg 1,1-Dichloroethene ND S.0 ug/kg 1,1-Dichloroethene ND S.0 ug/kg 1,1-Dichloroethene ND S.0 ug/kg 1,1-Dichloropropane ND S.0 ug/kg 1,2-Dichloropropane ND S.0 ug/kg 1,3-Dichloropropane ND S.0 ug/kg 1,3-Dichloropropane ND S.0 ug/kg	4-Chlorotoluene	ND	5.0	
chloropropane (DBCP) 1,2-Dibromoethane (EDB) ND 5.0 ug/kg Dibromomethane ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichlorobenzene ND 5.0 ug/kg Dichlorodifluoromethane ND 10 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethene ND 5.0 ug/kg trans-1,2-Dichloroethene ND 2.5 ug/kg trans-1,2-Dichloroethene ND 5.0 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,1-Dichloropropane ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 2,2-Dichloropropane ND 5.0 ug/kg	1,2-Dibromo-3-	ND	10	
Dibromomethane ND 1,4-Dichlorobenzene ND 1,2-Dichlorobenzene ND 1,3-Dichlorobenzene ND Dichlorodifluoromethane ND 10 10 10 10/kg 1,1-Dichloroethane ND 1,2-Dichloroethane ND 1,2-Dichloroethane ND 1,2-Dichloroethane ND 2.5 1/kg 1,1-Dichloroethane ND 2.5 1/kg 1,1-Dichloroethane ND 2.5 1/kg 1,1-Dichloroethane ND 3.0 1/kg 1,1-Dichloroethane ND 3.0 1/kg 1,2-Dichloroethane ND 5.0 1/kg 1,3-Dichloropropane ND 5.0 1/kg 1,3-Dichloropropane ND 5.0 1/kg 1,3-Dichloropropane ND 5.0 1/kg 1,3-Dichloropropane ND 5.0 1/kg	chloropropane (DBCP)			
Dibromomethane ND 5.0 ug/kg 1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichlorobenzene ND 5.0 ug/kg Dichlorodifluoromethane ND 10 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg cis-1,2-Dichloroethene ND 2.5 ug/kg trans-1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 2,2-Dichloropropane ND 5.0 ug/kg	1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
1,4-Dichlorobenzene ND 5.0 ug/kg 1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichlorobenzene ND 5.0 ug/kg Dichlorodifluoromethane ND 10 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg cis-1,2-Dichloroethene ND 2.5 ug/kg trans-1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 2,2-Dichloropropane ND 5.0 ug/kg	Dibromomethane	ND	5.0	
1,2-Dichlorobenzene ND 5.0 ug/kg 1,3-Dichlorobenzene ND 5.0 ug/kg Dichlorodifluoromethane ND 10 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg cis-1,2-Dichloroethene ND 2.5 ug/kg trans-1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 2,2-Dichloropropane ND 5.0 ug/kg	1,4-Dichlorobenzene	ND	5.0	
1,3-Dichlorobenzene ND 5.0 ug/kg Dichlorodifluoromethane ND 10 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg cis-1,2-Dichloroethene ND 2.5 ug/kg trans-1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 2,2-Dichloropropane ND 5.0 ug/kg	1,2-Dichlorobenzene	ND	5.0	
Dichlorodifluoromethane ND 10 ug/kg 1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg cis-1,2-Dichloroethene ND 2.5 ug/kg trans-1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 2,2-Dichloropropane ND 5.0 ug/kg	1,3-Dichlorobenzene	ND	5.0	
1,1-Dichloroethane ND 5.0 ug/kg 1,2-Dichloroethane ND 5.0 ug/kg cis-1,2-Dichloroethene ND 2.5 ug/kg trans-1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 1,3-Dichloropropane ND 5.0 ug/kg 2,2-Dichloropropane ND 5.0 ug/kg	Dichlorodifluoromethane	ND	10	
1,2-DichloroethaneND5.0ug/kgcis-1,2-DichloroetheneND2.5ug/kgtrans-1,2-DichloroetheneND2.5ug/kg1,1-DichloroetheneND5.0ug/kg1,2-DichloropropaneND5.0ug/kg1,3-DichloropropaneND5.0ug/kg2,2-DichloropropaneND5.0ug/kg	1,1-Dichloroethane	ND	5.0	
cis-1,2-DichloroetheneND2.5ug/kgtrans-1,2-DichloroetheneND2.5ug/kg1,1-DichloroetheneND5.0ug/kg1,2-DichloropropaneND5.0ug/kg1,3-DichloropropaneND5.0ug/kg2,2-DichloropropaneND5.0ug/kg2,2-DichloropropaneND5.0ug/kg	1,2-Dichloroethane	ND	5.0	
trans-1,2-Dichloroethene ND 2.5 ug/kg 1,1-Dichloroethene ND 5.0 ug/kg 1,2-Dichloropropane ND 5.0 ug/kg 1,3-Dichloropropane ND 5.0 ug/kg 2,2-Dichloropropane ND 5.0 ug/kg	cis-1,2-Dichloroethene	ND	2.5	
1,1-DichloroetheneND5.0ug/kg1,2-DichloropropaneND5.0ug/kg1,3-DichloropropaneND5.0ug/kg2,2-DichloropropaneND5.0ug/kg	trans-1,2-Dichloroethene	ND	2.5	
1,2-DichloropropaneND5.0ug/kg1,3-DichloropropaneND5.0ug/kg2,2-DichloropropaneND5.0ug/kg	1,1-Dichloroethene	ND	5.0	
1,3-Dichloropropane ND 5.0 ug/kg 2,2-Dichloropropane ND 5.0 ug/kg	1,2-Dichloropropane	ND	5.0	
2,2-Dichloropropane ND 5.0 ug/kg	1,3-Dichloropropane	ND	5.0	_
	2,2-Dichloropropane	ND		
	1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene ND 5.0 ug/kg	_ _ _ _	ND		
Hexachlorobutadiene ND 5.0 ug/kg				
Isopropylbenzene ND 5.0 ug/kg		ND		
p-Isopropyltoluene ND 5.0 ug/kg	p-Isopropyltoluene	ND	•	

Client Sample ID: B-69-3

GC/MS Volatiles

Lot-Sample #: D1K150281-004	Work Order #	: EN3CP1AA	Matrix: SOLID
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene .	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene		•	
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND ·	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
· · · · · · · · · · · · · · · · · · ·	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	107	(80 - 120)	
1,2-Dichloroethane-d4	105	(79 - 125)	
4-Bromofluorobenzene	104	(71 - 132)	

(77 - 117)

93

Toluene-d8

Client Sample ID: B-69-15

GC/MS Volatiles

Lot-Sample #...: D1K150281-005 Work Order #...: EN3CW1AA Matrix.....: SOLID

Date Sampled...: 11/12/01 11:15 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 13:41

Dilution Factor: 1

		REPORTIN	īG
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND .	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg .
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-69-15

Lot-Sample #	ŧ:	D1K150281-005	Work Order	#:	EN3CW1AA	Matrix:	SOLID

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	•
Methylene chloride	ND	5.0	ug/kg	
Naphthalene	ND	5.0	ug/kg	•
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND	5.0	ug/kg	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	ND .	5.0	ug/kg	
Tetrachloroethene	ND	5.0	ug/kg	
Toluene	ND	5.0	ug/kg	
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
1,2,4-Trichloro-	ND	5.0	ug/kg	
benzene	.*		-5/5	
1,1,1-Trichloroethane	ND	5.0	ug/kg	· ,
1,1,2-Trichloroethane	ND	5.0	ug/kg	
Trichloroethene	ND	5.0	ug/kg	
Trichlorofluoromethane	ND	10	ug/kg	•
1,2,3-Trichloropropane	ND · ·	5.0	ug/kg	en en en en en en en en en en en en en e
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
Vinyl chloride	ND	5.0	ug/kg	
m-Xylene & p-Xylene	ND	2.5	ug/kg	
o-Xylene	ND	2.5	ug/kg	
	PERCENT	RECOVERY		,
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	114	(80 - 120)		
1,2-Dichloroethane-d4	111	(79 - 125)		
4-Bromofluorobenzene	106	(71 - 132)		
Toluene-d8	96	(77 - 117)		

Client Sample ID: B-77-5

GC/MS Volatiles

Lot-Sample #...: D1K150281-006 Work Order #...: EN3C01AA Matrix.....: SOLID

Date Sampled...: 11/12/01 12:00 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 14:07

Dilution Factor: 1

% Moisture....: 21 **Method.....:** SW846 8260B

			· ·	
		REPORTIN	'G	
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	5.0	ug/kg	
Bromobenzene	ND	5.0	ug/kg	
Bromochloromethane	ND	5.0	ug/kg	
Bromodichloromethane	ND	5.0	ug/kg	
Bromoform	ND	5.0	ug/kg	
Bromomethane	ND	10	ug/kg	
n-Butylbenzene	ND	5.0	ug/kg	
sec-Butylbenzene	ND	5.0	ug/kg	
tert-Butylbenzene	ND	5.0	ug/kg	
Carbon tetrachloride	ND	5.0	ug/kg	
Chlorobenzene	ND	5.0	ug/kg	
Chlorodibromomethane	ND	5.0	ug/kg	
Chloroethane	ND	10	ug/kg	
Chloroform	ND	10	ug/kg	
Chloromethane	ND	10	ug/kg	
2-Chlorotoluene	ND	5.0	ug/kg	
4-Chlorotoluene	ND	5.0	ug/kg	
1,2-Dibromo-3-	ND	10	ug/kg	
chloropropane (DBCP)	. •			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	
Dibromomethane	ND	5.0	ug/kg	
1,2-Dichlorobenzene	ND	5.0	ug/kg	
1,3-Dichlorobenzene	ND	5.0	ug/kg	
1,4-Dichlorobenzene	ND	5.0	ug/kg	
Dichlorodifluoromethane	ND	10	ug/kg	
1,1-Dichloroethane	6.3	5.0	ug/kg	
1,2-Dichloroethane	ND	5.0	ug/kg	
cis-1,2-Dichloroethene	ND	2.5	ug/kg	
trans-1,2-Dichloroethene	ND	2.5	ug/kg	
1,1-Dichloroethene	ND	5.0	ug/kg	
1,2-Dichloropropane	ND	5.0	ug/kg	
1,3-Dichloropropane	ND	5.0	ug/kg	
2,2-Dichloropropane	" ND	5.0	ug/kg	
1,1-Dichloropropene	ND	5.0	ug/kg	
Ethylbenzene	ND	5.0	ug/kg	
Hexachlorobutadiene	ND	5.0	. ug/kg	
Isopropylbenzene	ND	5.0	ug/kg	
p-Isopropyltoluene	ND .	5.0	ug/kg	

Client Sample ID: B-77-5

GC/MS Volatiles

Matrix..... SOLID

	•	REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg .
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kgʻ
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND .	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	115	(80 - 120)
1,2-Dichloroethane-d4	111	(79 - 125)
4-Bromofluorobenzene	106	(71 - 132)
Toluene-d8	95	(77 - 117)

Lot-Sample #...: D1K150281-006 Work Order #...: EN3C01AA

Client Sample ID: B-77-16

GC/MS Volatiles

Lot-Sample #...: D1K150281-007 Work Order #...: EN3C11AA Matrix.....: SOLID

 Date Sampled...:
 11/12/01
 12:15
 Date Received...:
 11/14/01

 Prep Date.....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325482
 Analysis Time...:
 14:33

Dilution Factor: 1

% Moisture....: 8.4 **Method.....:** SW846 8260B

	•	REPORTIN	G	
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	5.0	ug/kg	_
Bromobenzene	ND	5.0	ug/kg	
Bromochloromethane	ND	5.0	ug/kg	
Bromodichloromethane	ND	5.0	ug/kg	
Bromoform	ND	5.0	ug/kg	
Bromomethane	ND	10	ug/kg	
n-Butylbenzene	ND	5.0	ug/kg	
sec-Butylbenzene	- ND .	5.0	ug/kg	
tert-Butylbenzene	ND	5.0	ug/kg	
Carbon tetrachloride	ND	5.0	ug/kg	
Chlorobenzene	ND	5.0	ug/kg	
Chlorodibromomethane	ND	5.0	ug/kg	
Chloroethane	ND	10	ug/kg	
Chloroform	ND	10	ug/kg	
Chloromethane	ND	10	ug/kg	
2-Chlorotoluene	ND	5.0	ug/kg	
4-Chlorotoluene	ND	5.0	ug/kg	
1,2-Dibromo-3-	ND	10	ug/kg	
chloropropane (DBCP)	•			
1,2-Dibromoethane (EDB)	ИĎ	5.0	ug/kg	
Dibromomethane	ND	5.0	ug/kg	
1,2-Dichlorobenzene	ND	5.0	ug/kg	
1,3-Dichlorobenzene	ND	5.0	ug/kg	
1,4-Dichlorobenzene	ND	5.0	ug/kg	
Dichlorodifluoromethane	ND	10	ug/kg	
1,1-Dichloroethane	ND	5.0	ug/kg	
1,2-Dichloroethane	ND	5.0	ug/kg	
cis-1,2-Dichloroethene	ND	2.5	ug/kg	
trans-1,2-Dichloroethene	ND ,	2.5	ug/kg	
1,1-Dichloroethene	ND	5.0	ug/kg	
1,2-Dichloropropane	ND	5.0	ug/kg	
1,3-Dichloropropane	ND	5.0	ug/kg	
2,2-Dichloropropane	ND	5.0	ug/kg	
1,1-Dichloropropene	ND	5.0	ug/kg	
Ethylbenzene	ND	5.0	ug/kg	
Hexachlorobutadiene	ND	5.0	ug/kg	
Isopropylbenzene	ND	5.0	ug/kg	
p-Isopropyltoluene	ND	5.0	ug/kg	

Client Sample ID: B-77-16

TOU	sampre #:	DIKI50281-007	MOLK Order	#:	ENSCITAA	Matrix:	SOLID
					*		

	.*	REPORTING	G		
PARAMETER	RESULT	LIMIT	UNITS		
Methylene chloride	ND	5.0	ug/kg		
Naphthalene	ND	5.0	ug/kg		
n-Propylbenzene	ND	5.0	ug/kg		
Styrene	ND	5.0	ug/kg		
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg		
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg		
Tetrachloroethene	ND	5.0	ug/kg		
Toluene	ND	5.0	ug/kg		
1,2,3-Trichlorobenzene	, ND	5.0	ug/kg	•	
1,2,4-Trichloro-	ND	5.0	ug/kg		
benzene					
1,1,1-Trichloroethane	ND	5.0	ug/kg		
1,1,2-Trichloroethane	ND	5.0	ug/kg		
Trichloroethene	ND.	5.0	ug/kg		
Trichlorofluoromethane	ND	10	ug/kg		
1,2,3-Trichloropropane	ND	5.0	ug/kg		
1,2,4-Trimethylbenzene	ND	5.0	ug/kg		
1,3,5-Trimethylbenzene	ND	5.0	ug/kg		
Vinyl chloride	ND	5.0	ug/kg		
m-Xylene & p-Xylene	ND	2.5	ug/kg		
o-Xylene	ND	2.5	ug/kg		
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	106	(80 - 120			
1,2-Dichloroethane-d4	106	(79 - 125	•		
4-Bromofluorobenzene	99	(71 - 132	•		
1/11/16/16 = CX	an	/77 117	/ \		

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	106	(80 - 120)
1,2-Dichloroethane-d4	106	(79 - 125)
4-Bromofluorobenzene	99	(71 - 132)
Toluene-d8	90	(77 - 117)

Client Sample ID: B-77-19

GC/MS Volatiles

Lot-Sample #...: D1K150281-008 Work Order #...: EN3C41AA Matrix..... WATER

Date Sampled...: 11/12/01 12:20 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 14:34

Dilution Factor: 1

Method..... SW846 8260B

•		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L
1,2-Dibromo-3-	ND	2.0	ug/L
chloropropane (DBCP)			-
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene ·	ŇD .	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	8.9	1.0	ug/L
1,2-Dichloroethane	ND ,	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	0.50	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L

Client Sample ID: B-77-19

Lot-Sample #: D1K150281-008	Work Order #: EN3C41AA	Matrix WATER
-----------------------------	------------------------	--------------

		REPORTING	•
PARAMETER	RESULT	LIMIT	UNITS
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	1.1	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
1,2,4-Trichloro-	ND	1.0	ug/L
benzene		•	3 , .
1,1,1-Trichloroethane	2.7	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L ·
Trichloroethene	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
•	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	107	(80 - 120)	
1,2-Dichloroethane-d4	109	(72 - 127)	
4-Bromofluorobenzene	97	(79 - 119)	
Toluene-d8	715	(79 - 119)	•

Client Sample ID: B-59-3

GC/MS Volatiles

Lot-Sample #...: D1K150281-009 Work Order #...: EN3C51AA Matrix...... SOLID

Date Sampled...: 11/12/01 13:30 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 14:59

Dilution Factor: 1

% Moisture....: 22 Method....: SW846 8260B

		REPORTIN	G
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg ·
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	8.6	5.0	ug/kg
sec-Butylbenzene	18 .	5.0	ug/kg
tert-Butylbenzene	12	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	50	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane .	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	46	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	11	5.0	ug/kg
p-Isopropyltoluene	8.1	5.0	ug/kg

Client Sample ID: B-59-3

Lot-Sample #: D1K150281-009	Work Order #: EN3C51AA	Matrix SOLID
-----------------------------	------------------------	--------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	30	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND ·	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	6.5	5.0	ug/kg
1,2,3-Trichlorobenzene	ND .	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane -	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	70	5.0	ug/kg '
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	27	2.5	ug/kg
o-Xylene	6.1	2.5	ug/kg
	•		
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	116	(80 - 120)	
1,2-Dichloroethane-d4	117	(79 - 125)	· · · · · · · · · · · · · · · · · · ·
4-Bromofluorobenzene	132	(71 - 132)	
Toluene-d8	102	(77 - 117)	

Client Sample ID: B-59-15

GC/MS Volatiles

Lot-Sample #...: D1K150281-010 Work Order #...: EN3C61AA Matrix.....: SOLID

Date Sampled...: 11/12/01 14:10 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 15:24

Dilution Factor: 1

% Moisture....: 9.4 **Method.....:** SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS "
Benzene	ND	5.0	ug/kg
Bromobenzene	ND ÷	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND , ,	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND ,	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	· ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND -	5.0	ug/kg

Client Sample ID: B-59-15

Lot-Sample :	#:	D1K150281-010	Work Order	#:	EN3C61AA	Matrix:	SOLID

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
Methylene chloride	ND	5.0	ug/kg	
Naphthalene	ND	5.0	ug/kg	
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND	5.0	ug/kg	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
Tetrachloroethene	ND	5.0	ug/kg	
Toluene	ND	5.0	ug/kg	
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	•
1,2,4-Trichloro-	ND	5.0	ug/kg	
benzene				
1,1,1-Trichloroethane	ND	5.0	ug/kg	
1,1,2-Trichloroethane	ND	5.0	ug/kg	
Trichloroethene	ND	5.0	ug/kg	
Trichlorofluoromethane	ND	10	ug/kg	
1,2,3-Trichloropropane	ND ·	5.0	ug/kg	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
Vinyl chloride	ND	5.0	ug/kg	
m-Xylene & p-Xylene	ND	2.5	ug/kg	
o-Xylene	ND	2.5	ug/kg	
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	102	(80 - 120)	-	
1,2-Dichloroethane-d4	98	(79 - 125)		
4-Bromofluorobenzene	96 .	(71 - 132)		
Toluene-d8	90	(77 - 117)		
		,		

Client Sample ID: B-107-3

GC/MS Volatiles

Lot-Sample #...: D1K150281-012 Work Order #...: EN3C81AA Matrix.....: SOLID

Date Sampled...: 11/12/01 14:00 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 15:50

Dilution Factor: 1

% Moisture....: 25 **Method.....:** SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	. ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND .	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND .	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND .	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-107-3

Loc-Sample #: DIK150281-012	Work Order	#: I	EN3C81AA	Matrix	 SOLID

		REPORTING		
PARAMETER	RESULT	LIMIT '	UNITS	
Methylene chloride	ND	5.0	ug/kg	
Naphthalene	ND	5.0	ug/kg	
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND	5.0	ug/kg	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
Tetrachloroethene	9.4	5.0	ug/kg	
Toluene	ND	5.0	ug/kg	
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
1,2,4-Trichloro-	ND	5.0	ug/kg	
benzene			57 5 ,	
1,1,1-Trichloroethane	ND	5.0	ug/kg	
1,1,2-Trichloroethane	ND	5.0	ug/kg	
Trichloroethene	ND	5.0	ug/kg	
Trichlorofluoromethane	ND	10	ug/kg	
1,2,3-Trichloropropane	ND ·	5.0	ug/kg	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
Vinyl chloride	ND	5.0	ug/kg	
m-Xylene & p-Xylene	ND	2.5	ug/kg	\$
o-Xylene	ND	2.5	ug/kg	
	PERCENT	RECOVERY '		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	113	(80 - 120)	•	
1,2-Dichloroethane-d4	105	(79 - 125)		•
4-Bromofluorobenzene	109	(71 - 132)		
Toluene-d8	100	(77 - 117)		

		RECOVERI
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	113	(80 - 120)
1,2-Dichloroethane-d4	105	(79 - 125)
4-Bromofluorobenzene	. 109	(71 - 132)
Toluene-d8	100	(77 - 117)

Client Sample ID: B-108-16

GC/MS Volatiles

Lot-Sample #...: D1K150281-013 Work Order #...: EN3DE1AA Matrix.....: SOLID

Date Sampled...: 11/12/01 12:15 Date Received..: 11/14/01 Prep Date.....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 16:16

Dilution Factor: 1

% Moisture....: 4.3 Method....: SW846 8260B

	·	REPORTIN	IG	
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	5.0	ug/kg	
Bromobenzene	ND	5.0	ug/kg	
Bromochloromethane	ND	5.0	ug/kg	
Bromodichloromethane	ND	5.0	ug/kg	
Bromoform	ND	5.0	ug/kg	
Bromomethane	ND	10	ug/kg	
n-Butylbenzene	ND	5.0	ug/kg	
sec-Butylbenzene	ND	5.0	ug/kg	
tert-Butylbenzene	ND	5.0	ug/kg	
Carbon tetrachloride	ND	5.0	ug/kg	
Chlorobenzene	ND	5.0	ug/kg	,
Chlorodibromomethane	ND	5.0	ug/kg	
Chloroethane	ND	10	ug/kg	
Chloroform	ND	10	ug/kg	
Chloromethane	, ND	10	ug/kg	
2-Chlorotoluene	ND	5.0	ug/kg	
4-Chlorotoluene	ND'	5.0	ug/kg	
1,2-Dibromo-3-	ND	10	ug/kg	
chloropropane (DBCP)				
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	•
Dibromomethane	ND	5.0	ug/kg	,
1,2-Dichlorobenzene	ND	5.0	ug/kg	
1,3-Dichlorobenzene	ND	5.0	ug/kg	
1,4-Dichlorobenzene	ND	5.0	ug/kg	
Dichlorodifluoromethane	ND	10	ug/kg	
1,1-Dichloroethane	ND	5.0	ug/kg	
1,2-Dichloroethane	ND	5.0	ug/kg	
cis-1,2-Dichloroethene	ND	2.5	ug/kg	
trans-1,2-Dichloroethene	ND	2.5	ug/kg	
1,1-Dichloroethene ·	ND	5.0	ug/kg	
1,2-Dichloropropane	ND	5.0	ug/kg	
1,3-Dichloropropane	ND	5.0	ug/kg	
2,2-Dichloropropane	ND	5.0	ug/kg	
1,1-Dichloropropene	ND	5.0	ug/kg	
Ethylbenzene	ND	5.0	ug/kg ˌ	
Hexachlorobutadiene	ND	5.0	ug/kg	
Isopropylbenzene	ND -	5.0	ug/kg	
p-Isopropyltoluene	ND	5.0	ug/kg	

Client Sample ID: B-108-16

Lot-Sample #: D1K150281-013 Work Order #: EN3DE1AA Matrix SOLID

		REPORTING			
PARAMETER	RESULT	LIMIT	UNITS		
Methylene chloride	ND	5.0	ug/kg	•	
Naphthalene	ND	5.0	ug/kg		
n-Propylbenzene	ND	5.0	ug/kg		
Styrene	ND	5.0	ug/kg		
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg		
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	,	
Tetrachloroethene	ND	5.0	ug/kg		
Toluene	ND	5.0	ug/kg		
1,2,3-Trichlorobenzene	ND	5.0	ug/kg		
1,2,4-Trichloro-	ND ·	5.0	ug/kg		
benzene					
1,1,1-Trichloroethane	ND	5.0	ug/kg	·	
1,1,2-Trichloroethane	ND	5.0	ug/kg		
Trichloroethene	ND	5.0	ug/kg -		
Trichlorofluoromethane	ND	10	ug/kg		•
1,2,3-Trichloropropane	ND	5.0	ug/kg		7
1,2,4-Trimethylbenzene	ND	5.0	ug/kg		
1,3,5-Trimethylbenzene	ND	5.0	ug/kg		
Vinyl chloride	ND	5.0	ug/kg		
m-Xylene & p-Xylene	ND	2.5	ug/kg		
o-Xylene	ND	2.5	ug/kg		
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	106	(80 - 120)			
1,2-Dichloroethane-d4	104	(79 - 125)			
4-Bromofluorobenzene	97	(71 - 132)		•	
Toluene-d8	93	(77 - 117)			

Client Sample ID: B-63-0.5

GC/MS Volatiles

Lot-Sample #...: D1K150281-014 Work Order #...: EN3DG1AA Matrix.....: SOLID

Date Sampled...: 11/12/01 14:10 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 16:41

Dilution Factor: 1

•		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND ,	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
, Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			,
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	. 2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	. ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-63-0.5

Lot-Sample #: D1K150281-014	Work Order #: EN3DG1AA	Matrix SOLID
-----------------------------	------------------------	--------------

		REPORTING			
PARAMETER	RESULT	LIMIT	UNITS	•	
Methylene chloride	ND	5.0	ug/kg		•
Naphthalene	ND	5.0	ug/kg		
n-Propylbenzene	ND	5.0	ug/kg		
Styrene	ND	5.0	ug/kg		
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg		
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg		
Tetrachloroethene	24	5.0	ug/kg		
Toluene	ND	5.0	ug/kg		
1,2,3-Trichlorobenzene	ND	5.0	ug/kg		
1,2,4-Trichloro-	ND	5.0	ug/kg		
benzene					
1,1,1-Trichloroethane	ND	5.0	ug/kg		
1,1,2-Trichloroethane	ND	5.0	ug/kg		
Trichloroethene	ND	5.0 ,	ug/kg		
Trichlorofluoromethane	ND	10	ug/kg		
1,2,3-Trichloropropane	ND	5.0	ug/kg		
1,2,4-Trimethylbenzene	ND	5.0	ug/kg		
1,3,5-Trimethylbenzene	ND	5.0	ug/kg		•
Vinyl chloride	ND	5.0	ug/kg		
m-Xylene & p-Xylene	ND	2.5	ug/kg	•	
o-Xylene	ND	2.5	ug/kg	·	
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	117	(80 - 120)	_ !		
1,2-Dichloroethane-d4	112	(79 - 125)			
4-Bromofluorobenzene	129	(71 - 132)			
Toluene-d8	109	(77 - 117)			

Client Sample ID: B-63-11

GC/MS Volatiles

Lot-Sample #...: D1K150281-015 Work Order #...: EN3DQ1AA Matrix.....: SOLID

Date Sampled...: 11/12/01 14:20 Date Received..: 11/14/01 Prep Date....: 11/19/01 Analysis Date..: 11/20/01 Prep Batch #...: 1330178 Analysis Time..: 16:29

Dilution Factor: 1.95

% Moisture....: 30 **Method.....:** SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	490	ug/kg
Bromobenzene	ND	490	ug/kg
Bromochloromethane	ND	490	ug/kg
Bromodichloromethane	ND	490	ug/kg
Bromoform	ND	490	ug/kg
Bromomethane	ND	980	ug/kg
n-Butylbenzene	ND	490	ug/kg
sec-Butylbenzene	ND	490	ug/kg
tert-Butylbenzene	ND	490	ug/kg
Carbon tetrachloride	ND	490	ug/kg
Chlorobenzene	ND	490	ug/kg
Chlorodibromomethane	ND	490	ug/kg
Chloroethane	ND	980	ug/kg
Chloroform	ND	980	ug/kg
Chloromethane	ND	980	ug/kg
2-Chlorotoluene	ND	490	ug/kg
4-Chlorotoluene	ND	490	ug/kg
1,2-Dibromo-3-	ND	980	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	490	ug/kg
Dibromomethane	ND -	490	ug/kg
1,2-Dichlorobenzene	ND	490	ug/kg
1,3-Dichlorobenzene	ND	490 .	ug/kg
1,4-Dichlorobenzene	ND	490	ug/kg
Dichlorodifluoromethane	ND	980	ug/kg
1,1-Dichloroethane	ND	490	ug/kg
1,2-Dichloroethane	ND	490	ug/kg
cis-1,2-Dichloroethene	ND	240	ug/kg
trans-1,2-Dichloroethene	ND	240	ug/kg
1,1-Dichloroethene	ND	490	ug/kg
1,2-Dichloropropane	ND	490	ug/kg
1,3-Dichloropropane	ND	490	ug/kg
2,2-Dichloropropane	ND	490	ug/kg
1,1-Dichloropropene	ND	490	ug/kg
Ethylbenzene	· ND	490	ug/kg
Hexachlorobutadiene	ND	490	ug/kg
Isopropylbenzene	ND	490	ug/kg
p-Isopropyltoluene	ND	490	ug/kg

Client Sample ID: B-63-11

Lot-Sample #: D1K150281-015	Work Order #: I	EN3DQ1AA 1	Matrix:	SOLID
-----------------------------	-----------------	------------	---------	-------

			REPORTING		
PARAMETER	RESULT		LIMIT	UNITS	
Methylene chloride	ND		490	ug/kg	
Naphthalene	ND		490	ug/kg	
n-Propylbenzene	ND		490	ug/kg	
Styrene'	ND		490	ug/kg	
1,1,1,2-Tetrachloroethane	ND		490	ug/kg	
1,1,2,2-Tetrachloroethane	ND		490	ug/kg	
Tetrachloroethene	11000	٠	490	ug/kg	
Toluene	ND .	*	490	ug/kg	•
1,2,3-Trichlorobenzene	ND		490	ug/kg	
1,2,4-Trichloro-	ND		490	ug/kg	
benzene			•	5,5	
1,1,1-Trichloroethane	1000		490	ug/kg	
1,1,2-Trichloroethane	ND		490	ug/kg	
Trichloroethene	590		490	ug/kg	
Trichlorofluoromethane	ND		980	ug/kg	*
1,2,3-Trichloropropane	ND	*	490	ug/kg	
1,2,4-Trimethylbenzene	ND		490	ug/kg	
1,3,5-Trimethylbenzene	ND	•	490	ug/kg	
Vinyl chloride	ND		490	ug/kg	•
m-Xylene & p-Xylene	ND		240	ug/kg	
o-Xylene	ND		240	ug/kg	
				3,3	
	PERCENT		RECOVERY	-	
SURROGATE	RECOVERY		LIMITS		
Dibromofluoromethane '	76		(72 - 121)		
1,2-Dichloroethane-d4	70 .		(53 - 131)		
4-Bromofluorobenzene	80		(71 - 127)	,	1
Toluene-d8	77		(57 - 130)		

Client Sample ID: B-63-19

GC/MS Volatiles

Lot-Sample #...: D1K150281-016 Work Order #...: EN3DR1AA Matrix.....: SOLID

Date Sampled...: 11/12/01 14:30 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 17:32

Dilution Factor: 1

% Moisture....: 10 **Method.....:** SW846 8260B

		REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND ,	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0°	ug/kg
Bromoform	ND .	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	· ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND.	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)	e e e e e e e e e e e e e e e e e e e		
1,2-Dibromoethane (EDB)	ND.	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND ·	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0 *	ug/kg
1,4-Dichlorobenzene '	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND .	5.0	ug/kg .
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-63-19

Lot-Sample #: D1K150281-0	16 Work Order #	.: EN3DR1AA	Matrix SOLIE
		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene			
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	•		
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	108	(80 - 120)	
1,2-Dichloroethane-d4	107	(79 - 125)	
4-Bromofluorobenzene	96	(71 - 132)	
Toluene-d8	89	(77 - 117)	•

Client Sample ID: B-63-20

GC/MS Volatiles

Lot-Sample #...: D1K150281-017 Work Order #...: EN3DV1AA Matrix..... WATER

Date Sampled...: 11/12/01 14:35 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 15:00

Dilution Factor: 2

Method..... SW846 8260B

REPORTING PARAMETER RESULT LIMIT UNITS ND 2.0 uq/L Benzene ND 2.0 Bromobenzene uq/L Bromochloromethane ND 2.0 uq/L Bromodichloromethane ND 2.0 ug/L Bromoform ND 2.0 ug/L Bromomethane ND 4.0 ug/L n-Butylbenzene ND 2.0 ug/L sec-Butylbenzene ND 2.0 ug/L tert-Butylbenzene ND 2.0 2 ug/L Carbon tetrachloride ND 2.0 ug/L Chlorobenzene ND 2.0 ug/L Chlorodibromomethane ND 2.0 uq/L Chloroethane ND 4.0 ug/L Chloroform ND 2.0 uq/L Chloromethane ND 4.0 uq/L 2-Chlorotoluene ND 2.0 ug/L 4-Chlorotoluene ND 2.0 ug/L Dibromomethane ND 2.0 ug/L 1,2-Dichlorobenzene ND 2.0 ug/L 1,3-Dichlorobenzene ND 2.0 ug/L 1,4-Dichlorobenzene ND 2.0 ug/L Dichlorodifluoromethane ND 4.0 ug/L 1,1-Dichloroethane 2.5 2.0 uq/L 1,2-Dichloroethane ND 2.0 ug/L 1,1-Dichloroethene ND 2.0 ug/L cis-1,2-Dichloroethene ND 2.0 ug/L trans-1,2-Dichloroethene ND 1.0 uq/L 1,2-Dichloropropane ND 2.0 ug/L 1,3-Dichloropropane ND 2.0 ug/L 2,2-Dichloropropane ND 10 ug/L 1,1-Dichloropropene ND 2.0 uq/L Ethylbenzene ND 2.0 ug/L Trichlorofluoromethane ND 4.0 ug/L Hexachlorobutadiene ND 2.0 ug/L Isopropylbenzene ND 2.0 uq/L p-Isopropyltoluene ND 2.0 ug/L Methylene chloride ug/L ND 2.0 Naphthalene ND 2.0 ug/L

Client Sample ID: B-63-20

Lot-Sample #: D1K150281-0	7 Work Order #: EN3DV1AA	Matrix WATER
---------------------------	--------------------------	--------------

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	2.0	ug/L
Styrene	ND	2.0	ug/L
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L
Tetrachloroethene	32	2.0	ug/L
Toluene '	ND	2.0	ug/L
1,2,3-Trichlorobenzene	ND	2.0	ug/L
1,2,4-Trichloro-	ND	2.0	ug/L
benzene	•		
1,1,1-Trichloroethane	9.0	2.0	ug/L
1,1,2-Trichloroethane	ND	2.0	ug/L
Trichloroethene	ND	2.0	ug/L
1,2,3-Trichloropropane	ND	2.0	ug/L
1,2,4-Trimethylbenzene	ND	2.0	ug/L
1,3,5-Trimethylbenzene	ND	2.0	ug/L
Vinyl chloride	ND	2.0	ug/L
o-Xylene	ND	2.0	ug/L
m-Xylene & p-Xylene	ND	4.0	ug/L
1,2-Dibromo-3-	ND	4.0	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	2.0	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	107	(80 - 120)	
1,2-Dichloroethane-d4	108	(72 - 127)	
4-Bromofluorobenzene	94	(79 - 119)	
Toluene-d8	115	(79 - 119)	
•			

Client Sample ID: B-80-1

GC/MS Volatiles

Lot-Sample #...: D1K150281-018 Work Order #...: EN3D01AA Matrix.....: SOLID

Date Sampled...: 11/12/01 14:55 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 17:58

Dilution Factor: 1

% Moisture....: 3.9 **Method.....:** SW846 8260B

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg ,
Bromomethane	ND	10 .	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0 .	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	" ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND .	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	. ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-80-1

GC/MS Volatiles

LOT-Sample #: D1K150281-018 Work	Order #: EN3D01A	A Matrix SOLID
----------------------------------	------------------	----------------

,		REPORTING				
PARAMETER	RESULT	LIMIT	UNITS			
Methylene chloride	ND	5.0	ug/kg			
Naphthalene	ND	5.0	ug/kg			
n-Propylbenzene	ND	5.0	ug/kg			
Styrene	ND	5.0	ug/kg	*:		
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg			
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg			
Tetrachloroethene	, ND	5.0	ug/kg			
Toluene	ND -	5.0	ug/kg			
1,2,3-Trichlorobenzene	ND	5.0	ug/kg			
1,2,4-Trichloro-	ND	5.0	ug/kg			
benzene			ر. ار		•	
1,1,1-Trichloroethane	ND	5.0	ug/kg			
1,1,2-Trichloroethane	ND	5.0	ug/kg			
Trichloroethene	ND	5.0	ug/kg			٠
Trichlorofluoromethane	ND	10	ug/kg			
1,2,3-Trichloropropane	ND	5.0	ug/kg			
1,2,4-Trimethylbenzene	ND	5.0	ug/kg			
1,3,5-Trimethylbenzene	ND	5.0	ug/kg			
Vinyl chloride	ND	5.0	ug/kg			
m-Xylene & p-Xylene	ND	2.5	ug/kg		*	
o-Xylene	ND	2.5	ug/kg			
	PERCENT .	PDG01mp11				
SURROGATE		RECOVERY				
Dibromofluoromethane	RECOVERY	LIMITS				
1,2-Dichloroethane-d4	114	(80 - 120)		•		
4-Bromofluorobenzene	110	(79 - 125)				
Toluene-d8	110	(71 - 132)				
TOTACHE "US	99	(77 - 117)			,	

Client Sample ID: B-80-15

GC/MS Volatiles

Lot-Sample #...: D1K150281-019 Work Order #...: EN3D41AA Matrix.....: SOLID

Date Sampled...: 11/12/01 15:05 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 18:24

Dilution Factor: 1

% Moisture....: 12 Method.....: SW846 8260B

,		REPORTING	•
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND ,	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND.	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg .
1,2-Dichloroethane	ND .	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND .	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-80-15

GC/MS Volatiles

Lot-Sample #: D1K150281-019	Work Order #: EN3D41AA	Matrix SOLID

		REPORTING	·	
PARAMETER	RESULT	LIMIT	UNITS	
Methylene chloride	ND ·	5.0	ug/kg	
Naphthalene	ND	5.0	ug/kg	
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND	5.0	ug/kg	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	•
1,1,2,2-Tetrachloroethane	ND	5.0 ·	ug/kg	
Tetrachloroethene	ND	5.0	ug/kg	
Toluene	ND	5.0	ug/kg	*
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
1,2,4-Trichloro-	ND	5.0	ug/kg	
benzene				
1,1,1-Trichloroethane	ND	5.0	ug/kg	
1,1,2-Trichloroethane	ND -	5.0	ug/kg	
Trichloroethene	ND	5.0	ug/kg	
Trichlorofluoromethane	ND	10	ug/kg	
1,2,3-Trichloropropane	ND	5.0	ug/kg	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	•
Vinyl chloride	ND	5.0	ug/kg	4
m-Xylene & p-Xylene	ND	2.5	ug/kg	
o-Xylene	ND	2.5	ug/kg	
		*		
	PERCENT	RECOVERY		• .
SURROGATE	RECOVERY	LIMITS	_	
Dibromofluoromethane	107	(80 - 120)		
1,2-Dichloroethane-d4	102	(79 - 125)		
4-Bromofluorobenzene	99	(71 - 132)		
Toluene-d8	93	(77 - 117)		

Client Sample ID: B-80-17

GC/MS Volatiles

Lot-Sample #...: D1K150281-020 Work Order #...: EN3D61AA Matrix...... WATER

Date Sampled...: 11/12/01 15:10 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 15:26

Dilution Factor: 1

Method....: SW846 8260B

		REPORTIN	G	
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	1.6	1.0	ug/L	
Bromobenzene	ND	1.0 .	ug/L	
Bromochloromethane	, ND	1.0	ug/L	
Bromodichloromethane	ND	1.0	ug/L	
Bromoform	ND	1.0	ug/L	
Bromomethane	ND	2.0	ug/L .	
n-Butylbenzene	ND	1.0	ug/L	
sec-Butylbenzene	ND	1.0	ug/L	
tert-Butylbenzene	ND	1.0	ug/L	
Carbon tetrachloride	ND	1.0	ug/L	
Chlorobenzene	ND	1.0	ug/L	
Chlorodibromomethane	ND	1.0	ug/L	
Chloroethane	i ND	2.0	ug/L	
Chloroform	ND ,	1.0	ug/L	
Chloromethane	ND	2.0	ug/L	
2-Chlorotoluene	ND	1.0	ug/L	
4-Chlorotoluene	ND	1.0	ug/L	
Dibromomethane	ND	1.0	ug/L	
1,2-Dichlorobenzene	ND	1.0	ug/L	
1,3-Dichlorobenzene	ND	1.0	ug/L	
1,4-Dichlorobenzene	ND	1.0	ug/L	
Dichlorodifluoromethan	e ND	2.0	ug/L	-
1,1-Dichloroethane	, 33	1.0	ug/L	
1,2-Dichloroethane	ND	1.0	ug/L	
1,1-Dichloroethene	ND	1.0	ug/L	
cis-1,2-Dichloroethene	2.1	1.0	ug/L	
trans-1,2-Dichloroethe	ne 3.0	0.50	ug/L	
1,2-Dichloropropane	, ND	1.0	ug/L	
1,3-Dichloropropane	ND	1.0	ug/L	•
2,2-Dichloropropane	, ND	5.0	ug/L	
1,1-Dichloropropene	ND	1.0	ug/L	
Ethylbenzene	1.7	1.0	ug/L	
Trichlorofluoromethane	ND	2.0	ug/L	
Hexachlorobutadiene	' ND	1.0	ug/L	
Isopropylbenzene	ND	1.0	ug/L	
p-Isopropyltoluene	ND	1.0	ug/L	
Methylene chloride	ND	1.0	ug/L	
Naphthalene	ND	1.0	ug/L	

Client Sample ID: B-80-17

GC/MS Volatiles

Lot-Sample #: D1K150281-020 Work Order #: EN3D61AA Matrix W	IATER
---	-------

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
n-Propylbenzene	ND	1.0	ug/L	•.
Styrene	ND	1.0	ug/L	
1,1,1,2-Tetrachloroethane	ND	1.0 .	ug/L	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	
Tetrachloroethene	ND	1.0	ug/L	
Toluene	ND	1.0	ug/L	•
1,2,3-Trichlorobenzene	ND	1.0	ug/L	
1,2,4-Trichloro- benzene	ND	1.0	ug/L	
1,1,1-Trichloroethane	ND	1 0	· · · · /T	
1,1,2-Trichloroethane	ND	1.0	ug/L	•
Trichloroethene	ND ND	1.0	ug/L	
1,2,3-Trichloropropane	ND ND	1.0	ug/L	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	
1,3,5-Trimethylbenzene		1.0	ug/L	•
Vinyl chloride	ND	1.0	ug/L	
o-Xylene	ND ,	1.0	ug/L	
m-Xylene & p-Xylene	1.8	1.0	ug/L	
1,2-Dibromo-3-	14	2.0	ug/L	3
chloropropane (DBCP)	ND	2.0	ug/L	
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	
	PERCENT	RECOVERY	•	•
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	108	(80 - 120)		•
1,2-Dichloroethane-d4	111	(72 - 127)		
4-Bromofluorobenzene	94	(79 - 119)	•	•
Toluene-d8	118	(79 - 119)		v.

Client Sample ID: B-83-1

GC/MS Volatiles

Lot-Sample #...: D1K150281-021 Work Order #...: EN3D71AA Matrix.....: SOLID

Date Sampled...: 11/12/01 15:45 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 18:50

Dilution Factor: 1

% Moisture....: 20 **Method.....:** SW846 8260B

· ·		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND .	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg '
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene .	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND .	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND .	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	. ND	10 '	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0 .	ug/kg

Client Sample ID: B-83-1

GC/MS Volatiles

Lot-Sample #: D1K150281-021 Work Ord	r #: EN3D71AA	Matrix	SOLID
--------------------------------------	---------------	--------	-------

•		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
Methylene chloride	ND	5.0	ug/kg	-
Naphthalene	ND	5.0	ug/kg	
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND	5.0	ug/kg	•
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
Tetrachloroethene	ND	5.0	ug/kg	
Toluene	ND	5.0	ug/kg	*
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	
1,2,4-Trichloro-	ND	5.0	ug/kg	•
benzene				
1,1,1-Trichloroethane	ND	5.0	ug/kg	
1,1,2-Trichloroethane	ND	5.0	ug/kg	
Trichloroethene	ND	5.0	ug/kg	
Trichlorofluoromethane	ND.	10	ug/kg	
1,2,3-Trichloropropane	ND	5.0	ug/kg	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND .	5.0	ug/kg	₹ .
Vinyl chloride	ND	5.0	ug/kg	
m-Xylene & p-Xylene	ND	2.5	ug/kg	
o-Xylene	ND	2.5	ug/kg	
			~5/ 1.5	•
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Dibromofluoromethane	116	(80 - 120)		
1,2-Dichloroethane-d4	116	(79 - 125)		
4-Bromofluorobenzene	109	(71 - 132)	* .	
Toluene-d8	101	(77 - 117)		
				• •

Client Sample ID: B-83-15

GC/MS Volatiles

Lot-Sample #...: D1K150281-022 Work Order #...: EN3EA1AA Matrix.....: SOLID

Date Sampled...: 11/12/01 15:55 Date Received..: 11/14/01 Prep Date....: 11/20/01 Analysis Date...: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 19:16

Dilution Factor: 1

% Moisture....: 8.8 **Method.....:** SW846 8260B

•	•	REPORTING	3
PARAMETER	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene '	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND	5.0	ug/kg
Carbon tetrachloride	, ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND, *	10	ug/kg
chloropropane (DBCP)			*
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND .	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene	ND	5.0	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-83-15

GC/MS Volatiles

Matrix....: SOLID

		REPORTI	JC.	
PARAMETER	RESULT	LIMIT	UNITS	
Methylene chloride	ND	5.0	ug/kg	
Naphthalene	ND	5.0	ug/kg	a a
n-Propylbenzene	ND	5.0	ug/kg	
Styrene	ND	5.0	ug/kg	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
Tetrachloroethene	ND	5.0	ug/kg	
Toluene	ND	5.0	ug/kg	
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	· . •
1,2,4-Trichloro-	ND	5.0	ug/kg	
benzene			~3/ .tg	
1,1,1-Trichloroethane	ND	5.0	ug/kg	
1,1,2-Trichloroethane	ND	5.0	ug/kg	
Trichloroethene	ND	5.0	ug/kg	
Trichlorofluoromethane	ND	10	ug/kg	
1,2,3-Trichloropropane	ND	5.0	ug/kg	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	
Vinyl chloride	ND	5.0	ug/kg	
m-Xylene & p-Xylene	ND	2.5	ug/kg	
O. Virlana		-	-5/115	

2.5

ug/kg

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
Dibromofluoromethane	103	(80 - 120)
1,2-Dichloroethane-d4	102	(79 - 125)
4-Bromofluorobenzene	98	(71 - 132)
Toluene-d8	90	(77 - 117)

ND

o-Xylene

Lot-Sample #...: D1K150281-022 Work Order #...: EN3EA1AA

Client Sample ID: B-83-17

GC/MS Volatiles

Lot-Sample #...: D1K150281-023 Work Order #...: EN3EC1AA Matrix...... WATER

 Date Sampled...:
 11/12/01 16:05
 Date Received...:
 11/14/01

 Prep Date.....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325275
 Analysis Time...:
 15:52

Dilution Factor: 20

Method.....: SW846 8260B

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	
Benzene	ND	20	ug/L	
Bromobenzene ,	ND	. 20	ug/L	
Bromochloromethane	ND	20	ug/L	
Bromodichloromethane	ND	20	ug/L	
Bromoform	ND	20	ug/L	
Bromomethane	ND	40	ug/L	
n-Butylbenzene	ND	20	ug/L	
sec-Butylbenzene	ND	20	ug/L	
tert-Butylbenzene	ND .	20	ug/L	
Carbon tetrachloride	ND	20	ug/L	
Chlorobenzene	ND	20	ug/L	
Chlorodibromomethane	ND ·	20	ug/L	
Chloroethane	ND	40	ug/L	
Chloroform	ND	20	ug/L	
Chloromethane	ND	40	ug/L	
2-Chlorotoluene	ND	20	ug/L	7.
4-Chlorotoluene	ND	20	ug/L	
Dibromomethane	ND	20	ug/L	-
1,2-Dichlorobenzene	ND	20	ug/L	
1,3-Dichlorobenzene	ND	20	ug/L	
1,4-Dichlorobenzene	ND	20	ug/L	
Dichlorodifluoromethane	ND	40	ug/L	
1,1-Dichloroethane	44	20	ug/L	
1,2-Dichloroethane	ND	20 .	ug/L	
1,1-Dichloroethene	ND	20	ug/L	
cis-1,2-Dichloroethene	ND	20	ug/L	
trans-1,2-Dichloroethene	ND	10	ug/L	
1,2-Dichloropropane	ND	20	ug/L	
1,3-Dichloropropane	ND	20	ug/L	
2,2-Dichloropropane	ND	100	ug/L	
1,1-Dichloropropene	ND	20	ug/L	
Ethylbenzene	120	20	ug/L	
Trichlorofluoromethane	ND	40	ug/L	
Hexachlorobutadiene	ND	20	ug/L	
Isopropylbenzene	ND	20	ug/L	
p-Isopropyltoluene	ND	20	ug/L	
Methylene chloride	ND .	20	ug/L	
Naphthalene	ND	20	ug/L	

Client Sample ID: B-83-17

GC/MS Volatiles

Lot-Sample	‡:	D1K150281-023	Work Order	#: EN3EC1AA	Matrix:	WATER

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
n-Propylbenzene	ND	20	ug/L
Styrene	ND	20	ug/L
1,1,1,2-Tetrachloroethane	ND	20	ug/L
1,1,2,2-Tetrachloroethane	ND ,	20	ug/L
Tetrachloroethene	ND	20	ug/L
Toluene	39	20	ug/L
1,2,3-Trichlorobenzene	ND	20	ug/L
1,2,4-Trichloro-	ND	20	ug/L
benzene			
1,1,1-Trichloroethane	ND	20	ug/L
1,1,2-Trichloroethane	ND	20	ug/L
Trichloroethene	ND	20	ug/L
1,2,3-Trichloropropane	ND	20	ug/L
1,2,4-Trimethylbenzene	ND	20	ug/L
1,3,5-Trimethylbenzene	ND	20	ug/L`
Vinyl chloride	ND .	20	ug/L
o-Xylene	190	20	ug/L
m-Xylene & p-Xylene	310	40	ug/L
1,2-Dibromo-3-	ND	40	ug/L
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	20	ug/L
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	- .
Dibromofluoromethane	108	(80 - 120)
1,2-Dichloroethane-d4	111	(72 - 127	•
4-Bromofluorobenzene	92	(79 - 119)
Toluene-d8	116	(79 - 119)

Client Sample ID: B-109-15

GC/MS Volatiles

Lot-Sample #...: D1K150281-024 Work Order #...: EN3EE1AA Matrix...... SOLID

 Date Sampled...:
 11/12/01
 16:00
 Date Received...:
 11/14/01

 Prep Date....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325482
 Analysis Time...:
 19:42

Dilution Factor: 1

% Moisture....: 4.3 **Method.....:** SW846 8260B

		REPORTING	3
PARAMETER '	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	ug/kg
Bromodichloromethane ·	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	10	ug/kg
n-Butylbenzene	ND	5.0	ug/kg
sec-Butylbenzene	ND	5.0	ug/kg
tert-Butylbenzene	ND .	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chlorodibromomethane	ND	5.0	ug/kg
Chloroethane	ND	10 .	ug/kg
Chloroform	ND	10	ug/kg
Chloromethane	ND	10	ug/kg
2-Chlorotoluene	ND	5.0	ug/kg
4-Chlorotoluene	ND	5.0	ug/kg
1,2-Dibromo-3-	ND	10	ug/kg
chloropropane (DBCP)			
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg
Dibromomethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	10	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	2.5	ug/kg
trans-1,2-Dichloroethene	ND	2.5	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
1,3-Dichloropropane	ND	5.0	ug/kg
2,2-Dichloropropane	ND	5.0	ug/kg
1,1-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Hexachlorobutadiene [†]	ND	5.0	ug/kg
Isopropylbenzene	ND ·	5.0	ug/kg
p-Isopropyltoluene	ND	5.0	ug/kg

Client Sample ID: B-109-15

GC/MS Volatiles

Lot-Sample #: D1K150281-024	Work Order #: EN3	EE1AA Matrix	SOLID
-----------------------------	-------------------	--------------	-------

	•	REPORTING	•
PARAMETER	RESULT	LIMIT	UNITS
Methylene chloride	ND	5.0	ug/kg
Naphthalene	ND	5.0	ug/kg
n-Propylbenzene	ND	5.0	ug/kg
Styrene	ND .	5.0	ug/kg
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND .	5.0	ug/kg
Tetrachloroethene	ND .	5.0	ug/kg
Toluene	ND'	5.0	ug/kg
1,2,3-Trichlorobenzene	ND	5.0	ug/kg
1,2,4-Trichloro-	ND	5.0	ug/kg
benzene		•	J. J
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	10	ug/kg
1,2,3-Trichloropropane	ND	5.0	ug/kg
1,2,4-Trimethylbenzene	ND	5.0	ug/kg
1,3,5-Trimethylbenzene	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
m-Xylene & p-Xylene	ND	2.5	ug/kg
o-Xylene	ND	2.5	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Dibromofluoromethane	111	(80 - 120)	
1,2-Dichloroethane-d4	112	(79 - 125)	
4-Bromofluorobenzene	104	(71 - 132)	
Toluene-d8	95	(77 - 117)	

Client Sample ID: B-68-4

GC/MS Semivolatiles

Lot-Sample #...: D1K150281-001 Work Order #...: EN3AJ1AM Matrix.....: SOLID

Date Sampled...: 11/12/01 08:15 Date Received..: 11/14/01 Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Prep Batch #...: 1325202 Analysis Time..: 21:31

Dilution Factor: 1

% Moisture....: 20 Method....: SW846 8270C

		REPORTIN	1G		
PARAMETER	RESULT	LIMIT	UNITS	MDL	
Acenaphthene	ND	330	ug/kg	46	
Acenaphthylene	ND	330	ug/kg	34	
Anthracene	ND	330	ug/kg	78	
Benzo(a)anthracene	ND	330	ug/kg	39	
Benzo(b)fluoranthene	ND	330	ug/kg	100	
Benzo(k)fluoranthene	ND	330	ug/kg	93	
Benzo(ghi)perylene	ND	330	ug/kg	70	
Benzo(a)pyrene	ND	330	ug/kg	94	•
Chrysene	ND	330	ug/kg	53	
Dibenz(a,h)anthracene	ND	330	ug/kg	47	
Fluoranthene	ND	330	ug/kg	84	
Fluorene	ND	330	ug/kg	76	
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	48	
Naphthalene	ND	330	ug/kg	70	•
Phenanthrene	ND	330	ug/kg	37	
Pyrene	ND	330	ug/kg	40	
bis(2-Ethylhexyl)	ND	330	ug/kg	69	
phthalate Dimethyl phthalate	ND .	330	ug/kg	85	
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
2-Fluorophenol	75	(34 - 97)		
Phenol-d5	70	(39 - 90) .		
Nitrobenzene-d5	75	(33 - 97)		
2-Fluorobiphenyl	74	(39 - 91	•		
2,4,6-Tribromophenol	58	(29 - 95			
Terphenyl-d14	81	(30 - 102	•		

Client Sample ID: B-68-16

GC/MS Semivolatiles

Lot-Sample #: D1K150281-00	2 Work Order #	.: EN3CK1AL	Matr	ix	: SOLID
Date Sampled: 11/12/01 08:	30 Date Received.	.: 11/14/01			
Prep Date: 11/21/01	Analysis Date.	.: 11/25/01			
Prep Batch #: 1325202	Analysis Time.	.: 21:54			
Dilution Factor: 1					
% Moisture: 7.4	Method	.: SW846 827	'0C		
	•				
		REPORTING	}		
PARAMETER	RESULT	LIMIT	UNITS	MDL	
Acenaphthene	ND	330	ug/kg	46	
Acenaphthylene	ND	330	ug/kg	34	
Anthracene	ND	330	ug/kg	78	
Benzo(a) anthracene	ND	330	ug/kg	39	
Benzo(b) fluoranthene	ND	330	ug/kg	100	*
Benzo(k) fluoranthene	ND	330	ug/kg	93	
Benzo(ghi)perylene	ND	330	ug/kg	70	
Benzo(a)pyrene	ND	330	ug/kg	94	
Chrysene	ND	330	ug/kg	53	
Dibenz(a,h)anthracene	ND	330	ug/kg	47	
Fluoranthene	ND	330	ug/kg	84	
Fluorene	ND	330	ug/kg	76	
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	48	
Naphthalene	ND	330	ug/kg	70	
Phenanthrene	ND	330	ug/kg	37	
Pyrene . '	ND	330	ug/kg	40	
bis(2-Ethylhexyl)	630	330	ug/kg	69	,
phthalate					
Dimethyl phthalate	ND .	330	ug/kg	85	
•					
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS	_	-	
2-Fluorophenol	68	(34 - 97	•		
Phenol-d5	62	(39 - 90)		,
Nitrobenzene-d5	68	(33 - 97)		

(39 - 91)

(29 - 95)

(30 - 102)

65

53

73

2-Fluorobiphenyl

Terphenyl-d14

2,4,6-Tribromophenol

7. 3

CAMERON-COLE LLC

Client Sample ID: B-105-16

GC/MS Semivolatiles

Lot-Sample #...: D1K150281-011 Work Order #...: EN3C71AN Matrix.....: SOLID

 Date Sampled...:
 11/12/01 13:00 Date Received...:
 11/14/01

 Prep Date.....:
 11/21/01 Analysis Date...:
 11/25/01

 Prep Batch #...:
 1325202 Analysis Time...:
 22:17

Dilution Factor: 1

Terphenyl-d14

% Moisture....: 7.4 Method.....: SW846 8270C

84

REPORTING

(30 - 102)

		TULL OICE II	10		
PARAMETER	RESULT	LIMIT	UNITS	MDL	
Acenaphthene	ND	330	ug/kg	46	
Acenaphthylene	ND	330	ug/kg	34	
Anthracene	ND	330	ug/kg	78	
Benzo(a)anthracene	ND	330	ug/kg	39	*
Benzo(b)fluoranthene	ND	330	ug/kg	100	
Benzo(k)fluoranthene	ND	330	ug/kg	93	
Benzo(ghi)perylene	ND	330	ug/kg	70	
Benzo(a)pyrene	ND	330	ug/kg	94	
Chrysene	ND	330	ug/kg	53	
Dibenz(a,h)anthracene	ND	330	ug/kg	47	· ·
Fluoranthene	ND	330	ug/kg	84	÷
Fluorene	ND	330	ug/kg	76	
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	48	
Naphthalene	ND	330	ug/kg	70	
Phenanthrene	ND	330	ug/kg	37	
Pyrene	ND	330	ug/kg	40	
bis(2-Ethylhexyl)	650	330	ug/kg	69	
phthalate			3, 3		
Dimethyl phthalate	ND	. 330	ug/kg	85	
			3. 3		
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS	*.		
2-Fluorophenol	. 73	(34 - 97			
Phenol-d5	67	(39 - 90) .		
Nitrobenzene-d5	73	(33 - 97			
2-Fluorobiphenyl	72	(39 - 91)		
2,4,6-Tribromophenol	65	(29 - 95)		

Client Sample ID: B-68-4

TOTAL Metals

Lot-Sample # Date Sampled % Moisture	: 11/12/01	-001 08:15 Date F	Received.	.: 11/14/0	01	Matrix:	SOLID
	4	REPORTING	3			PREPARATION-	WORK .
PARAMETER	RESULT	LIMIT	UNITS	METHOI	D	ANALYSIS DATE	ORDER #
Prep Batch #	1324368	•			•		
Mercury	ND ;	0.033	mg/kg	SW846	7471A	11/26/01	EN3AJ1AK
•	į	Dilution Fact	or: 1	Analysis	Time: 20:23		
	4						
Donald B	. 1224566						
Prep Batch # Silver	ND	1.0	mg/kg	SW846	6010B	11/20-11/27/01	EN3AJ1AE
	112	Dilution Fact			Time: 16:38		
	i	•		÷			
Arsenic	5.5	1.0	mg/kg		6010B	11/20-11/27/01	EN3AJ1AF
		Dilution Fact	or: 1	Analysis	Time: 16:38		
Barium	165	1.0	mq/kq	SW846	6010B	11/20-11/27/01	EN3AJ1AC
Dar ram	, r	Dilution Fact	3. 2		Time: 16:38	,	
Cadmium	ND	0.50	mg/kg		6010B	11/20-11/27/01	EN3A
•		Dilution Fact	or: 1	Analysis	Time: 16:38	•	
Chromium	21.3	1.0	mg/kg	SW846	6010B	11/20-11/27/01	EN3AJ1AD
CHIOMELIM	,	Dilution Fact			Time: 16:38		
				•			
Lead	10.4	0.80	mg/kg		6010B	11/20-11/27/01	EN3AJ1AH
	:	Dilution Fact	or: 1	Analysis	Time: 16:38		
Selenium	ND	1.3	mg/kg	SW846	6010B	11/20-11/27/01	FN3AT1AT
Perentani	112	Dilution Fact			Time: 16:38	11,20 11,27,01	2113110 1110
	1			•			

Client Sample ID: B-68-16

TOTAL Metals

	#: D1K150281 d: 11/12/01 : 7.4		Received.	.: 11/14/	01	Matrix:	SOLID
PARAMETER	RESULT	REPORTIN LIMIT	G UNITS	METHO	D	PREPARATION- ANALYSIS DATE	WORK ORDER #
Pron Patch	#: 1324368						
Mercury	ND	0.033 Dilution Fac	mg/kg		7471A	11/26/01	EN3CK1AJ
,		DITUCTON FAC	LOT: I	Analysis	Time: 20:25	•	
•						,	
_	#: 1324566				r^{\prime}		
Silver	ND	1.0	mg/kg	SW846	6010B	11/20-11/27/01	EN3CK1AD
		Dilution Fact	or: 1	Analysis	Time: 16:57		
Arsenic	ND	1.0	mg/kg		6010B	11/20-11/27/01	EN3CK1AE
	· ·	Dilution Fact	or: 1	Analysis	Time:,16:57		
Barium	30.1	1.0	mg/kg		6010B	11/20-11/27/01	EN3CK1AA
	AP.	Dilution Fact	or: 1	Analysis	Time: 16:57		
Cadmium	ND	0.50	mg/kg	SW846		11/20-11/27/01	EN3CK1AF
		Dilution Fact	or: 1	Analysis	Time: 16:57		•
Chromium	2.4	1.0	mg/kg	SW846	6010B	11/20-11/27/01	EN3CK1AC
		Dilution Fact	or: 1	Analysis	Time: 16:57		
Lead	2.2	0.80	mg/kg	SW846	6010B	11/20-11/27/01	EN3CK1AG
•		Dilution Fact	or: 1	Analysis	Time: 16:57		
Selenium	ИD	1.3	mg/kg .	SW846	6010B	11/20-11/27/01	EN3CK1AH

Analysis Time..: 16:57

Dilution Factor: 1

Client Sample ID: B-69-3

TOTAL Metals

Lot-Sample #: D1K1502	81-004	•	Matrix: SOLID

Date Sampled...: 11/12/01 11:00 Date Received..: 11/14/01 % Moisture....: 22

* Moisture	: 22			•	
		REPORTING		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	.: 1324368	· · · · · · · · · · · · · · · · · · ·	- -		
Mercury	ND	0.033 mg/kg	SW846 7471A	11/26/01	EN3CP1AK
	i	Dilution Factor: 1	Analysis Time: 20:27		
					•
Prep Batch #		1.0 mg/kg	SW846 6010B	/	באוס כים ז א בי
Silver	ND .	Dilution Factor: 1		11/20-11/2//01	ENSCRIAG
	•	Dilution Factor: 1	Analysis Time: 17:02		
Arsenic	5.5	1.0 mg/kg	SW846 6010B	11/20-11/27/01	EN3CP1AF
THE COLLEGE	3.3	Dilution Factor: 1	Analysis Time: 17:02	,,,	
	•	2-2		•	
Barium	190	1.0 ·· mg/kg	SW846 6010B	11/20-11/27/01	EN3CP1AC
	•	Dilution Factor: 1	Analysis Time: 17:02		
•			·		
Cadmium	ND	0.50 mg/kg	SW846 6010B	11/20-11/27/01	EN3CF
	*	Dilution Factor: 1	Analysis Time: 17:02		
				/ / /	
Chromium	23.0	1.0 mg/kg	SW846 6010B	11/20-11/27/01	EN3CPLAD
		Dilution Factor: 1	Analysis Time: 17:02		-
Lead	11.3	0.80 mg/kg	SW846 6010B	11/20-11/27/01	EN3CD1 VR
Leau	11.5	Dilution Factor: 1	Analysis Time: 17:02	11/20-11/21/01	,
		Dilucion Factor: 1	Analysis lime 17:02		
Selenium	ND .	1.3 mg/kg	SW846 6010B	11/20-11/27/01	EN3CP1AJ
	- (Dilution Factor: 1	Analysis Time: 17:02	, == ==, = , , •==	
			,		

Client Sample ID: B-69-15

TOTAL Metals

Lot-Sample #...: D1K150281-005 Matrix....: SOLID

Date Sampled...: 11/12/01 11:15 Date Received..: 11/14/01

% Moisture....: 15

THOUSE CALC.	••••			*	
PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	: 1324368				
Mercury	ND	0.033 mg/kg Dilution Factor: 1	SW846 7471A Analysis Time: 20:29	11/26/01	EN3CW1AK
Prep Batch #	: 1324566	•			
Silver	ND	1.0 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 17:07	11/20-11/27/01	EN3CW1AE
Arsenic	2.2	1.0 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 17:07	11/20-11/27/01	EN3CWlAF
Barium	34.5	1.0 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 17:07	11/20-11/27/01	EN3CW1AC
Cadmium	ND ,	0.50 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 17:07	11/20-11/27/01	EN3CW1AG
Chromium	7.5	1.0 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 17:07	11/20-11/27/01	EN3CW1AD
Lead	4.6	0.80 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 17:07	11/20-11/27/01	EN3CW1AH
Selenium	ND	1.3 mg/kg Dilution Factor: 1	SW846 6010B Analysis Time: 17:07	11/20-11/27/01	EN3CW1AJ

Client Sample ID: B-105-16

TOTAL Metals

Lot-Sample #...: D1K150281-011 Matrix....: SOLID

Date Sampled...: 11/12/01 13:00 Date Received..: 11/14/01

% Moisture...: 7.4

		REPORTIN	īG		PREPARATION- W	IORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD		RDER #
Prep Batch #	• 1324368					
Mercury	ND	በ በ33	mg/kg	SW846 7471A	11/26/01 E	N3C71AL
. ici car y	112	Dilution Fac		Analysis Time: 2	· · · · · · · · · · · · · · · · · · ·	MJC/IAH
			•	<u>.</u>		
Prep Batch #	: 1324566					
Silver	ND	1.0	mg/kg	SW846 6010B	11/20-11/27/01 E	N3C71AF
		Dilution Fac	tor: 1	Analysis Time: 1	7:12	
Arsenic	1.1	1.0	mg/kg	SW846 6010B	11/20-11/27/01 E	N3C71AG
		Dilution Fac		Analysis Time: 1		
Barium	18.6	1.0	mg/kg	SW846 6010B	11/20-11/27/01 E	N3C71AD
		Dilution Fac		Analysis Time: 1		
Cadmium	ND	0.50	ma/ka	SW846 6010B	11/20-11/27/01 E	N3C
	•.	Dilution Fac				NSC A
Chromium	3.1	1.0	ma/ka	SW846 6010B	11/20-11/27/01 E	እፕ <i>ንሮ</i> ን 1 አ ፑ
		Dilution Fac		Analysis Time: 1		M3C/IAB
		2 22	/1			
Lead	2.4	0.80 Dilution Fac	J. J		11/20-11/27/01 E	N3C71AJ
	***	Directon rac		Andrysis lime: 1.	:12 .	
Selenium	ND	1.3	mg/kg	SW846 6010B	11/20-11/27/01 E	N3C71AK

Client Sample ID: B-63-0.5

TOTAL Metals

Lot-Sample #...: D1K150281-014 Matrix....: SOLID

Date Sampled...: 11/12/01 14:10 Date Received..: 11/14/01

% Moisture....: 11

* MOISCUIE	•••••				*		
PARAMETER	RESULT	REPORTING	UNITS	METHO	ח	PREPARATION- ANALYSIS DATE	WORK ORDER #
-,					<u> </u>	INCOLD DATE	ORDER #
Prep Batch	#: 1324368						
Mercury	, ND	0.033	mg/kg	SW846	7471A	11/26/01	EN3DG1AK
		Dilution Fact	or: 1	Analysis	Time: 20:32	•	
	•						
Prep Batch	#: 1324566				at .		
Silver	ND	1.0	mg/kg	SW846	6010B	11/20-11/27/01	EN3DG1AE
		Dilution Fact	or: 1	Analysis	Time: 17:26		
_						·	
Arsenic	11.0	1.0	mg/kg		6010B	11/20-11/27/01	EN3DG1AF
	•	Dilution Fact	or: 1	Analysis	Time: 17:26	÷	
Barium	226	1.0	mg/kg	SMBVE	6010B	11/20-11/27/01	ENDOCING
	220	Dilution Facto			Time: 17:26	11/20-11/2//01	PHOTOGRAC
					11		
Cadmium	2.4	0.50	mg/kg	SW846	6010B	11/20-11/27/01	EN3DG1AG
		Dilution Facto	or: 1	Analysis	Time: 17:26		
·						•	
Chromium	51.0	1.0		SW846		11/20-11/27/01	EN3DG1AD
		Dilution Facto	or: 1	Analysis	Time: 17:26		
Lead	1020	0.80	ma/ka	SW846	6010B	11/20-11/27/01	באוסוסכו אנו
	 .	Dilution Facto	J. J		Time: 17:26	11/20-11/27/01	ENSIGIAN
		•					
Selenium	ND	1.3	mg/kg ´	SW846	6010B	11/20-11/27/01	EN3DG1AJ
	,	Dilution Facto	or: 1	Analysis	Time: 17:26		
				•			

Client Sample ID: B-63-11

TOTAL Metals

Lot-Sample #...: D1K150281-015
Date Sampled...: 11/12/01 14:20 Date Received..: 11/14/01 Matrix...: SOLID

% Moisture....: 30

* Moisture						
		REPORTIN	īG		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	: 1324368					
Mercury	ND	0.033	mg/kg	SW846 7471A	11/26/01	EN3DQ1AK
-	. •	Dilution Fac	tor: 1	Analysis Time: 20:34		
	•				ř	
Prep Batch #	- 1324566					
Silver	ND	1.0	mg/kg	SW846 6010B	11/20-11/27/01	EN3DQ1AE
		Dilution Fac		Analysis Time: 17:31		, -
_						
Arsenic	4.1	1.0		SW846 6010B	11/20-11/27/01	EN3DQ1AF
		Dilution Fac	tor: 1	Analysis Time: 17:31		
Barium	178	1.0	mg/kg	SW846 6010B	11/20-11/27/01	EN3DQ1AC
		Dilution Fac	tor: 1	Analysis Time: 17:31		
Cadmium	ND	0.50	mq/kq	SW846 6010B	11/20-11/27/01	EN3D
Cadmitam	ND	Dilution Fac	J. J	Analysis Time: 17:31		ENSD
						•
Chromium	19.8	1.0	mg/kg	SW846 6010B	11/20-11/27/01	EN3DQ1AD
•		Dilution Fac	tor: 1	Analysis Time: 17:31		
Lead	69.3	0.80	mg/kg	SW846 6010B	11/20-11/27/01	EN3DO1AH
		Dilution Fac	J. J	Analysis Time: 17:31	,,,	
				•		
Selenium	ND	1.3	mg/kg	SW846 6010B	11/20-11/27/01	EN3DQ1AJ
		Dilution Fac	tor: 1	Analysis Time: 17:31		

Client Sample ID: B-63-19

TOTAL Metals

Lot-Sample #...: D1K150281-016 Matrix..... SOLID Date Sampled...: 11/12/01 14:30 Date Received..: 11/14/01 % Moisture....: 10 REPORTING PREPARATION-WORK RESULT LIMIT UNITS METHOD ANALYSIS DATE ORDER # Prep Batch #...: 1324368 Mercury ND 0.033 mg/kg SW846 7471A 11/26/01 EN3DR1AK Dilution Factor: 1 Analysis Time..: 20:36 Prep Batch #...: 1324566 Silver ND 1.0 mg/kg SW846 6010B 11/20-11/27/01 EN3DR1AE Dilution Factor: 1 Analysis Time..: 17:36 Arsenic 1.5 1.0 mg/kg SW846 6010B 11/20-11/27/01 EN3DR1AF Dilution Factor: 1 Analysis Time..: 17:36 Barium 22.5 1.0 mg/kg SW846 6010B 11/20-11/27/01 EN3DR1AC Dilution Factor: 1 Analysis Time..: 17:36 Cadmium ND 0.50 mg/kg SW846 6010B 11/20-11/27/01 EN3DR1AG Dilution Factor: 1 Analysis Time..: 17:36 Chromium 1.6 1.0 mg/kg SW846 6010B 11/20-11/27/01 EN3DR1AD Dilution Factor: 1 Analysis Time..: 17:36 Lead 2.3 0.80 mg/kg SW846 6010B 11/20-11/27/01 EN3DR1AH Dilution Factor: 1 Analysis Time..: 17:36 Selenium ND 1.3 mg/kg SW846 6010B 11/20-11/27/01 EN3DR1AJ

Analysis Time..: 17:36

Dilution Factor: 1

QC DATA ASSOCIATION SUMMARY

D1K150281

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
001	SOLID	SW846 7471A	•	1324368	1330139
	SOLID	SW846 8260B		1325482	1325238
	SOLID	SW846 8270C		1325202	1325071
	SOLID	SW846 6010B		1324566	1324289
	SOLID	MCAWW 160.3 MOD	•	1332147	1332064
002	SOLID	SW846 7471A		1324368	1330139
	SOLID	SW846 8270C		1325202	1325071
	SOLID	SW846 6010B		1324566	1324289
	SOLID	MCAWW 160.3 MOD		1332147	1332064
		*			
003	WATER	SW846 8260B		1325275	1325115
004	SOLID	SW846 7471A		1324368	1330139
	SOLID	SW846 8260B		1325482	1325238
	SOLID	SW846 6010B		1324566	1324289
	SOLID	MCAWW 160.3 MOD		1332147	1332064
•				•	
005	SOLID	SW846 7471A		1324368	1330139
	SOLID	SW846 8260B		1325482	1325238
	SOLID	SW846 6010B		1324566	1324289
	SOLID	MCAWW 160.3 MOD		1332147	1332064
					•
006	SOLID	SW846 8260B		1325482	1325238
	SOLID	MCAWW 160.3 MOD	4	1332147	1332064
007	SOLID ·	SW846 8260B		1325482	1325238
	SOLID	MCAWW 160.3 MOD		1332147	1332064
800	WATER	SW846 8260B	•	1325275	1325115
009	SOLID	SW846 8260B		1325482	1325238
	SOLID	MCAWW 160.3 MOD		1332148	1332065
v	ъ.				
010	SOLID	SW846 8260B		1325482	1325238
	SOLID	MCAWW 160.3 MOD		1332148	1332065
	•				
011	SOLID	SW846 7471A		1324368	1330139
	SOLID	SW846 8270C		1325202	1325071
	SOLID	SW846 6010B		1324566	1324289
	SOLID	MCAWW 160.3 MOD		1332148	1332065

QC DATA ASSOCIATION SUMMARY

D1K150281

Sample Preparation and Analysis Control Numbers

		ANALYTICAL	LEACH	PREP	
SAMPLE#	MATRIX	METHOD	BATCH #	BATCH #	MS RUN#
012	SOLID	SW846 8260B		1325482	1325238
	SOLID	MCAWW 160.3 MOD		1332148	1332065
013	SOLID	SW846 8260B		1325482	1325238
	SOLID	MCAWW 160.3 MOD		1332148	1332065
014	SOLID	SW846 7471A		1324368	1330139
	SOLID	SW846 8260B		1325482	1325238
	SOLID	SW846 6010B		1324566	1324289
	SOLID	MCAWW 160.3 MOD		1332148	1332065
				,	:
015	SOLID	SW846 7471A		1324368	1330139
	SOLID	SW846 8260B	•	1330178	1330060
	SOLID	SW846 6010B		1324566	1324289
	SOLID	MCAWW 160.3 MOD	÷	1332148	1332065
016	SOLID	SW846 7471A		1324368	1330139
	SOLID	SW846 8260B	•	1325482	1325238
	SOLID	SW846 6010B		1324566	1324289
	SOLID	MCAWW 160.3 MOD		1332148	1332065
017	WATER	SW846 8260B		1325275	1325115
	•				
018	SOLID	SW846 8260B		1325482	1325238
	SOLID	MCAWW 160.3 MOD		1332148	1332065
019	SOLID	SW846 8260B		1325482	1325238
	SOLID	MCAWW 160.3 MOD		1332148	1332065
				1332140	1332003
020	WATER	SW846 8260B		1325275	1325115
021	SOLID	SW846 8260B		1325482	1325238
	SOLID	MCAWW 160.3 MOD		1332148	1332065
022	SOLID	SW846 8260B		1325482	1325238
•	SOLID	MCAWW 160.3 MOD		1332148	1332065
	1				
023	WATER	SW846 8260B		1325275	1325115
024	SOLID	SW846 8260B		1325482	1325238
. •	SOLID	MCAWW 160.3 MOD		1332148	1332065

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K150281 Work Order #...: EPFAE1AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-482 EPFAE1AD-LCSD

Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 10:30

Dilution Factor: 1

	PERCENT	RECOVERY	. F	RPD	
PARAMETER	RECOVERY	LIMITS	RPD I	<u>LIMITS</u>	METHOD
1,1-Dichloroethene	94	(78 - 118)			SW846 8260B
	96	(78 - 118)	2.3	(0-25)	SW846 8260B
Benzene	103	(79 - 121)			SW846 8260B
	105	(79 - 121)	2.3	(0-25)	SW846 8260B
Chlorobenzene	82	(76 - 116)			SW846 8260B
	84	(76 - 116)	2.8 ((0-25)	SW846 8260B
Toluene	83 .	(76 - 116)			SW846 8260B
	86	(76 - 116)	3.5 ((0-25)	SW846 8260B
Trichloroethene	101	(83 - 123)			SW846 8260B
	104	(83 - 123)	3.1 ((0-25)	SW846 8260B
•	•				
		PERCENT	RECOVER	ξX	
SURROGATE		RECOVERY	LIMITS		
Dibromofluoromethane	•	104	(80 - 1	20)	
		107	(80 - 1	.20)	
1,2-Dichloroethane-d4		102	(79 - 1	.25)	
·		104	(79 - 1	.25)	,
4-Bromofluorobenzene		93	(71 - 1	.32)	
		98	(71 - 1	.32)	•
Toluene-d8		87	(77 - 1	.17)	
•		91	(77 - 1	17)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

PERCENT

RECOVERY

RPD

METHOD

Client Lot #...: D1K150281 Work Order #...: EPFAE1AC-LCS Matrix..... SOLID

MEASURED

AMOUNT

LCS Lot-Sample#: D1K210000-482 EPFAE1AD-LCSD

Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 10:30

SPIKE

AMOUNT

Dilution Factor: 1

PARAMETER

1,1-Dichloroethene	50.0	47.0	ug/kg	94		SW846	8260B
	50.0	48.1	ug/kg	96	2.3	SW846	8260B
Benzene	50.0	51.5	ug/kg	103		SW846	8260B
	50.0	52.6	ug/kg	105	2.3	SW846	8260B
Chlorobenzene	50.0	40.9	ug/kg	82		SW846	8260B
• • •	50.0	42.1	ug/kg	84	2.8	SW846	8260B
Toluene	50.0	41.4	ug/kg	83		SW846	8260B
•	50.0	42.9	ug/kg	86	3.5	SW846	8260B
Trichloroethene	50.0	50.4	ug/kg	101		SW846	8260B
	50.0	52.0	ug/kg	104	3.1	SW846	8260B
			•				•
			PERCENT	RECOVERY			•
SURROGATE	_		RECOVERY	LIMITS			
Dibromofluoromethane		* * * * * * * * * * * * * * * * * * * *	104	(80 - 120))		
			107	(80 - 120))		
1,2-Dichloroethane-d4			102	(79 - 125	5)	•	
•			104	(79 - 125	;)		
4-Bromofluorobenzene			93	(71 - 132	:)		
			98	(71 - 132	:)		
Toluene-d8	*		87	(77 - 117	')		
			91	(77 - 117	·) .		

UNITS

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K150281 Work Order #...: EPD451AC-LCS Matrix.....: WATER

LCS Lot-Sample#: D1K210000-275 EPD451AD-LCSD

Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 10:04

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	,
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	92	(79 - 119)		SW846 8260E
	9,4	(79 - 119)	1.6 (0-20)	SW846 8260E
Benzene	94	(79 - 119)		SW846 8260E
	96	(79 - 119)	2.4 (0-20)	SW846 8260E
Chlorobenzene	88	(76 - 116)		SW846 8260E
·	94	(76 - 116)	6.5 (0-20)	SW846 8260E
Toluene	100	(75 - 122)		SW846 8260E
	102	(75 - 122)	2.3 (0-20)	SW846 8260E
Trichloroethene	87	(81 - 121)		SW846 8260E
	92	(81 - 121)	4.8 (0-20)	SW846 8260E
•	,			
•		PERCENT	RECOVERY	
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane		109	(80 - 120)	
		110	(80 - 120)	
1,2-Dichloroethane-d4	μ-	114	(72 - 127)	
		114	(72 - 127)	
4-Bromofluorobenzene		92	(79 - 119)	
		96	(79 - 119)	
Toluene-d8		109	(79 - 119)	
er i de la companya		109	(79 - 119)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K150281 Work Order #...: EPD451AC-LCS Matrix..... WATER

MEASURED

LCS Lot-Sample#: D1K210000-275 EPD451AD-LCSD

 Prep Date....: 11/20/01
 Analysis Date..: 11/20/01

 Prep Batch #...: 1325275
 Analysis Time..: 10:04

SPIKE

Dilution Factor: 1

PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	10.0	9.21	ug/L	92	*	SW846 8260B
	10.0	9.37	ug/L	94	1.6	SW846 8260B
Benzene	10.0	9.43	ug/L	94		SW846 8260B
	10.0	9.65	ug/L	96	2.4	SW846 8260B
Chlorobenzene	10.0	8.81	ug/L	88		SW846 8260B
•	10.0	9.41	ug/L	94	6.5	SW846 8260B
Toluene	10.0	10.0	ug/L	100		SW846 8260B
•	10.0	10.2	ug/L	102	2.3	SW846 8260B
Trichloroethene	10.0	8.74	ug/L	87		SW846 8260B
	10.0	9.17	ug/L	92	4.8	SW846 8260B
			PERCENT	RECOVERY	•	
SURROGATE	,		RECOVERY	LIMITS		
Dibromofluoromethane		•	109	(80 - 120	1	
			110	(80 - 120	•	
1,2-Dichloroethane-d4	•	•	114	(72 - 127	•	
=,= ==================================	**		114	(72 - 127)	•	
4-Bromofluorobenzene	-		92	(72 - 127)	•	

96

109

109

PERCENT

(79 - 119)

(79 - 119)

(79 - 119)

NOTE(S):

Toluene-d8

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K150281 Work Order #...: EPGA41AC-LCS Matrix.....: SOLID

LCS Lot-Sample#: D1K260000-178 EPGA41AD-LCSD

Prep Date....: 11/19/01 Analysis Date..: 11/20/01 Prep Batch #...: 1330178 Analysis Time..: 11:32

Dilution Factor: 1

	PERCENT	RECOVERY	RPD	
PARAMETER	RECOVERY	LIMITS	RPD LIMITS	METHOD
1,1-Dichloroethene	82	(54 - 129)		SW846 8260B
	88	(54 - 129)	6.0 (0-30)	SW846 8260B
Benzene	96	(73 - 119)	,	SW846 8260B
	94	(73 - 119)	2.1 (0-30)	SW846 8260B
Chlorobenzene	96	(70 - 120)		SW846 8260B
•••	97	(70 - 120)	1.1 (0-30)	SW846 8260B
Trichloroethene	97	(76 - 118)		SW846 8260B
	98	(76 - 118)	1.5 (0-30)	SW846 8260B
Toluene	93	(71 - 119)	. .	SW846 8260B `
•	93	(71 - 119)	0.090 (0-30)	SW846 8260B
•		PERCENT	RECOVERY	· · · · · · · · · · · · · · · · · · ·
SURROGATE		RECOVERY	LIMITS	
Dibromofluoromethane	•	105	(72 - 121)	•
		102	(72 - 121)	
1,2-Dichloroethane-d4		105	(53 - 131)	*
		98	(53 - 131)	÷ .

107

107 97

98

(71 - 127)

(71 - 127)

(57 - 130)

(57 - 130)

	NOTE	(S)) :
--	------	-----	-----

Toluene-d8

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

4-Bromofluorobenzene

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K150281

Work Order #...: EPGA41AC-LCS

LCS Lot-Sample#: D1K260000-178

EPGA41AD-LCSD

Prep Date....: 11/19/01

Analysis Date..: 11/20/01

Prep Batch #...: 1330178

Analysis Time..: 11:32

Dilution Factor: 1

•	SPIKE	MEASURED		PERCENT			
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	METHOD	
1,1-Dichloroethene	2000	1650	ug/kg	82		SW846 8260B	
• • • • • • • • • • • • • • • • • • •	2000	1750	ug/kg	88	6.0	SW846 8260B	
Benzene	2000	1920	ug/kg	96		SW846 8260B	*
•	2000	1880	ug/kg	94 '	2.1	SW846 8260B	
Chlorobenzene	2000	1920	ug/kg	96		SW846 8260B	
	2000	1950	ug/kg	97	1.1	SW846 8260B	
Trichloroethene	2000	1930	ug/kg	97		SW846 8260B	
	2000	1960	ug/kg	98	1.5	SW846 8260B	
Toluene	2000	1860	ug/kg	93		SW846 8260B	
	2000	1860	ug/kg	93	0.090	SW846 8260B	
			PERCENT	RECOVERY			
SURROGATE			RECOVERY	LIMITS			
Dibromofluoromethane		a a	105	(72 - 121)		•
			102	(72 - 121)		
1,2-Dichloroethane-d4	4 - 2		105	(53 - 131)		
			98	(53 - 131))		
4-Bromofluorobenzene			107	(71 - 127)).		
			107	(71 - 127))	- 1	
Toluene-d8			97	(57 - 130)	· ·		
t e			98	(57 - 130)			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K150281

Work Order #...: EPFAE1AA

Matrix....: SOLID

MB Lot-Sample #: D1K210000-482

Prep Date....: 11/20/01 Prep Batch #...: 1325482 Analysis Time..: 11:23

Analysis Date..: 11/20/01

Dilution Factor: 1

REPORTING

		REPORTIN		
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND *	10	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Chloroform	ND ·	: 10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Chlorodibromomethane	ND	5.0	ug/kg	SW846 8260B1
4-Chlorotoluene	ND ·	5.0	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	10 '	ug/kg	SW846 8260B
1,1-Dichloroethane	► ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	, ND	2.5	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	. SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Hexachlorobutadiene .	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Naphthalene .	ND	5.0	ug/kg	SW846 8260B ·
n-Propylbenzene	· ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

GC/MS Volatiles

		REPORTI	NG		
PARAMETER	RESULT	LIMIT	UNITS	METHO	· ·
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg		8260B
Tetrachloroethene	ND	5.0	ug/kg		8260B
Toluene	ND	5.0	ug/kg		8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg		8260B
1,2,4-Trichloro-	ND	5.0	ug/kg		8260B
benzene			. 3, 3		-1002
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846	8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846	
Trichloroethene	ND	5.0	ug/kg	SW846	
1,2,3-Trichloropropane	ND	5.0.	ug/kg	SW846	
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846	
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846	
Vinyl chloride	ND	5.0	ug/kg	SW846	
o-Xylene	ND	2.5	ug/kg	SW846	
m-Xylene & p-Xylene	ND	2.5	ug/kg	SW846	
1,2-Dibromo-3-	ND	10	ug/kg	SW846	
chloropropane (DBCP)			,	2.010	02005
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846	8260B
	PERCENT	RECOVERY	-		
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	113	(80 - 12	0)		
1,2-Dichloroethane-d4	110	(79 - 12			•
4-Bromofluorobenzene	102	(71 - 13			
Toluene-d8	97	(77 - 11			

Calculations are performed before rounding to avoid round-off errors in calculated results.

GC/MS Volatiles

Client Lot #...: D1K150281 Work Order #...: EPD451AA Matrix...... WATER

MB Lot-Sample #: D1K210000-275

Prep Date....: 11/20/01 Analysis Time..: 10:57

Analysis Date..: 11/20/01 Prep Batch #...: 1325275

Dilution Factor: 1

		REPORTI	NG.	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND -	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform ·	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	· ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,2-Dichloropropane	ND .	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND .	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

GC/MS Volatiles

CITEME LOC #: DIKI50281	Work Order	#: EPD45	1AA	Matrix	.: WATER
		REPORTI	NG		÷
PARAMETER	RESULT	LIMIT	UNITS	METHOD	

		REPORTI	NG		·-
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND .	1.0	ug/L	SW846 8260B	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trichloro-	ND	1.0	ug/L	SW846 8260B	
benzene		•			
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
o-Xylene	ND	1.0	ug/L	SW846 8260B	
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B	
1,2-Dibromo-3-	ND	2.0	ug/L	SW846 8260B	
chloropropane (DBCP)	•		57	2010 0200B	
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B	
			<i>37</i> –		
	PERCENT	RECOVERY	7		
SURROGATE	RECOVERY	LIMITS			
Dibromofluoromethane	109	(80 - 12	20)	* •	* *
1,2-Dichloroethane-d4	112	(72 - 12		•	
4-Bromofluorobenzene	98	(79 - 11		•	
Toluene-d8	113	(79 - 11			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D1K150281

MB Lot-Sample #: D1K260000-178

Analysis Date..: 11/20/01

Dilution Factor: 1

Work Order #...: EPGA41AA

Matrix....: SOLID

Prep Date....: 11/19/01

Prep Batch #...: 1330178

Analysis Time..: 12:22

•		REPORTI	1G	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Benzene	ND	250	ug/kg	SW846 8260B
Bromobenzene	ND .	250	ug/kg	SW846 8260B
Bromochloromethane	ND	250	ug/kg	SW846 8260B
Bromodichloromethane	ND	250	ug/kg	SW846 8260B
Bromoform	ND	250	ug/kg	SW846 8260B
Bromomethane	ND	500	ug/kg	SW846 8260B
n-Butylbenzene	ND	250	ug/kg	SW846 8260B
sec-Butylbenzene	ND	250	ug/kg	SW846 8260B
tert-Butylbenzene	ND	250	ug/kg	SW846 8260B
Carbon tetrachloride	ND	250	ug/kg	SW846 8260B
Chlorobenzene	ND	250	ug/kg	SW846 8260B
Chlorodibromomethane	ND	250	ug/kg	SW846 8260B
Chloroethane	ND	500	ug/kg	SW846 8260B
Chloroform	ND	500	ug/kg	SW846 8260B
Chloromethane	ND	500	ug/kg	SW846 8260B
2-Chlorotoluene	ND ·	250	ug/kg	SW846 8260B
4-Chlorotoluene	ND	250	ug/kg	SW846 8260B
Dibromomethane	ND .	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	500	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	130	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	130	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	250	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	. 250	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	250	ug/kg	SW846 8260B
Ethylbenzene	ND	250	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	500	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	250	ug/kg	SW846 8260B
Isopropylbenzene	ND	250	, ug/kg	SW846 8260B
p-Isopropyltoluene	ND	250	ug/kg	SW846 8260B
Methylene chloride	ND	250	ug/kg	SW846 8260B
Naphthalene	ND	250	ug/kg	SW846 8260B
n-Propylbenzene	· ND	250	ug/kg	SW846 8260B
Styrene	ND	250	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #: D1K150281	Work Order	#: EPGA4	1AA	Matrix SOLI			
		REPORTI	NG				
PARAMETER	RESULT	LIMIT	UNITS	METHOD			
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B			
Tetrachloroethene	ND , .	₂ 50	ug/kg	SW846 8260B			
Toluene	ND.	250	ug/kg	SW846 8260B			
1,2,3-Trichlorobenzene	ND	250	ug/kg	SW846 8260B			
1,2,4-Trichloro-	ND	250	ug/kg	SW846 8260B			
benzene	. •						
1,1,1-Trichloroethane	ND	250	ug/kg	SW846 8260B			
1,1,2-Trichloroethane	ND	250	ug/kg	SW846 8260B			
Trichloroethene	ND	250	ug/kg	SW846 8260B			
1,2,3-Trichloropropane	ND	250.	ug/kg	SW846 8260B			
1,2,4-Trimethylbenzene	ND	250	ug/kg	SW846 8260B			
1,3,5-Trimethylbenzene	ND	250	ug/kg	SW846 8260B			
Vinyl chloride	ND	250	ug/kg	SW846 8260B			
o-Xylene	ND	130	ug/kg	SW846 8260B			
m-Xylene & p-Xylene	ND	130	ug/kg	SW846 8260B			
1,2-Dibromo-3-	ND	500	ug/kg	SW846 8260B			
chloropropane (DBCP)							
1,2-Dibromoethane (EDB)	ND	250	ug/kg	SW846 8260B			
	PERCENT	RECOVERY					
SURROGATE	RECOVERY	LIMITS					
Dibromofluoromethane	99	(72 - 12	21)				
1,2-Dichloroethane-d4	99	(53 - 13	31)				
4-Bromofluorobenzene	102	(71 - 12					
Toluene-d8	94	(57 - 13					
				· ·			

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Matrix....: SOLID Work Order #...: EN3AJ1A8-MS Client Lot #...: D1K150281

EN3AJ1A9-MSD MS Lot-Sample #: D1K150281-001

Date Sampled...: 11/12/01 08:15 Date Received..: 11/14/01 Analysis Date..: 11/20/01 Prep Date....: 11/20/01 Analysis Time..: 12:24

Prep Batch #...: 1325482

% Moisture....: 20 Dilution Factor: 1

	PERCENT	RECOVERY		RPD		+ 1
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD	
1,1-Dichloroethene	99	(78 - 118)			SW846	8260B
•	90	(78 - 118)	9.1	(0-25)	SW846	8260B
Benzene	105	(79 - 121)			SW846	8260B
	95	(79 - 121)	9.7	(0-25)	SW846	8260B
Chlorobenzene	83	- (76 - 116)			SW846	
	76	(76 - 116)	9.4	(0-25)	SW846	8260B
Toluene	88	(76 - 116)			SW846	8260B
	80	(76 - 116)	9.5	(0-25)	SW846	8260B
Trichloroethene	105	(83 - 123)			SW846	8260B
	91	(83 - 123)	14	(0-25)	SW846	8260B
		PERCENT		RECOVERY		
SURROGATE		RECOVERY		LIMITS		
Dibromofluoromethane		114		(80 - 120)	
		102		(80 - 120)	
1,2-Dichloroethane-d4		110		(79 - 125)	
·		102		(79 - 125)	
4-Bromofluorobenzene		1.01		(71 - 132)	
		90		(71 - 132) .	•
Toluene-d8		94		(77 - 117)	A
		88		(77 - 117)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K150281 Work Order #...: EN3AJ1A8-MS Matrix.....: SOLID

MS Lot-Sample #: D1K150281-001 EN3AJ1A9-MSD

 Date Sampled...:
 11/12/01 08:15
 Date Received...:
 11/14/01

 Prep Date.....:
 11/20/01
 Analysis Date...:
 11/20/01

 Prep Batch #...:
 1325482
 Analysis Time...:
 12:24

Dilution Factor: 1 % Moisture....: 20

	SAMPLE	SPIKE	MEASRD	•	PERCENT		
PARAMETER	 AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	ND	50.0	49.3	ug/kg	99		SW846 8260B
	ND	50.0	45.0	ug/kg	90	9.1	SW846 8260B
Benzene	ND	50.0	52.6	ug/kg	105		SW846 8260B
	ND	50.0	47.7	ug/kg	95	9.7	SW846 8260B
Chlorobenzene	ND	50.0	41.7	ug/kg	83		SW846 8260B
	ND	50.0	38.0	ug/kg	76	9.4	SW846 8260B
Toluene	ND	50.0	48.2	ug/kg	88		SW846 8260B
	ND	50.0	43.9	ug/kg	80	9.5	SW846 8260B
Trichloroethene	ND	50.0	52.3	ug/kg	105		SW846 8260B
•	ND	50.0	45.3	ug/kg	91	14	SW846 8260B
			PERCENT		RECOVERY		
SURROGATE			DECOMED.	v ·	TIMITE		

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Dibromofluoromethane	114	(80 - 120)	•
	102	(80 - 120)	
1,2-Dichloroethane-d4	110	(79 - 125)	
	102	(79 - 125)	
4-Bromofluorobenzene	101	(71 - 132)	
	90	(71 - 132)	
Toluene-d8	94	(77 - 117)	
•	88 .	(77 - 117)	
And the second s	•		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K150281 Work Order #...: ENV3V1A1-MS Matrix..... WATER

MS Lot-Sample #: D1K130267-010 ENV3V1A2-MSD

Date Sampled...: 11/11/01 12:35 Date Received..: 11/13/01 Prep Date....: 11/20/01 Analysis Date..: 11/20/01 Prep Batch #...: 1325275 Analysis Time..: 12:21

Dilution Factor: 4

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	96	(79 - 119)			SW846 8260B
	95	(79 - 119)	0.77	(0-20)	SW846 8260B
Benzene	97	(79 - 119)			SW846 8260B
	96	(79 - 119)	1.4	(0-20)	SW846 8260B
Chlorobenzene	94	(76 - 116)			SW846 8260B
	94	(76 - 116)	0.44	(0-20)	SW846 8260B
Toluene	107	(75 - 122)			SW846 8260B
	106	(75 - 122)	0.68	(0-20)	SW846 8260B
Trichloroethene	88	(81 - 121)			SW846 8260B
	77 a	(81 - 121)	3.0	(0-20)	SW846 8260B
		PERCENT		RECOVERY	•
SURROGATE	_	RECOVERY		LIMITS	
Dibromofluoromethane		105		(80 - 120	
		104		(80 - 120)
1,2-Dichloroethane-d4		105		(72 - 127)
		107	•	(72 - 127)
4-Bromofluorobenzene		93		(79 - 119)
		94		(79 - 119)
Toluene-d8		113		(79 - 119)
		112		(79 - 119	,

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K150281 Work Order #...: ENV3V1A1-MS Matrix..... WATER

MS Lot-Sample #: D1K130267-010 . ENV3V1A2-MSD

Date Sampled...: 11/11/01 12:35 Date Received..: 11/13/01
Prep Date....: 11/20/01 Analysis Date..: 11/20/01
Prep Batch #...: 1325275 Analysis Time..: 12:21

Dilution Factor: 4

	SAMPLE	SPIKE	MEASRD		PERCENT		
PARAMETER	AMOUNT	AMT	TUUOMA	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	ND	40.0	38.4	ug/L	96		SW846 8260B
	ND	40.0	38.1	ug/L	95	0.77	SW846 8260B
Benzene	ND	40.0	38.9	ug/L	97		SW846 8260B
	ND	40.0	38.3	ug/L	96	1.4	SW846 8260B
Chlorobenzene	ND	40.0	37.7	ug/L	94		SW846 8260B
	ND	40.0	37.5	ug/L	94	0.44	SW846 8260B
Toluene	ND	40.0	42.7	ug/L	107		SW846 8260B
	ND	40.0	42.4	ug/L	106	0.68	SW846 8260B
Trichloroethene	120	40.0	158 🕟	ug/L	88		SW846 8260B
	120	40.0	153	ug/L	77 a	3.0	SW846 8260B

	PERCENT	RECOVERY
SURROGATE	RECOVERY ·	LIMITS
Dibromofluoromethane	105	(80 - 120)
•	104	(80 - 120)
1,2-Dichloroethane-d4	105	(72 - 127)
	107	(72 - 127)
4-Bromofluorobenzene .	93	(79 - 119)
	94	(79 - 119)
Toluene-d8	113	(79 - 119)
	112	(79 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D1K150281 Work Order #...: ENQ7C1AD-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120155-003 ENQ7C1AE-MSD

Date Sampled...: 11/07/01 13:50 Date Received..: 11/10/01 Prep Date....: 11/19/01 Analysis Date..: 11/20/01 Prep Batch #...: 1330178 Analysis Time..: 14:26

Dilution Factor: 1 % Moisture....: 14

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,1-Dichloroethene	76	(54 - 129)			SW846 8260B
	77	(54 - 129)	2.6	(0-30)	SW846 8260B
Benzene	86	(73 - 119)		•	SW846 8260B
-	90	(73 - 119)	5.6	(0-30)	SW846 8260B
Chlorobenzene	90	(70 - 120)			SW846 8260B
	93	(70 - 120)	4.2	(0-30)	SW846 8260B
Trichloroethene	90	(76 - 118)			SW846 8260B
	90	(76 - 118)	1.8	(0-30)	SW846 8260B
Toluene	91	(71 - 119)		:	SW846 8260B
3	90	(71 - 119)	0.42	(0-30)	SW846 8260B
		,			
•		PERCENT		RECOVERY	
SURROGATE	, _	RECOVERY		LIMITS	· ·
Dibromofluoromethane		91		(72 - 121)
	•	92		(72 - 121)
1,2-Dichloroethane-d4		86	•	(53 - 131)
		88		(53 - 131)
4-Bromofluorobenzene		98		(71 - 127	•
		100		(71 - 127)
Toluene-d8		97		(57 - 130)
		99	*	(57 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D1K150281 Work Order #...: ENQ7C1AD-MS Matrix..

MS Lot-Sample #: D1K120155-003

ENQ7ClAE-MSD

Date Sampled...: 11/07/01 13:50 Date Received..: 11/10/01 Prep Date....: 11/19/01

Analysis Date..: 11/20/01

Prep Batch #...: 1330178

Analysis Time..: 14:26

Dilution Factor: 1

% Moisture....: 14

	SAMPLE	SPIKE	MEASRD		PERCENT		•
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	ND	1930	1460	ug/kg	76		SW846 8260B
	ND	1960	1500	ug/kg	77	2.6	SW846 8260B
Benzene	ND	1930	1670	ug/kg	86		SW846 8260B
	ND .	1960	1760	ug/kg	90	5.6	SW846 8260B
Chlorobenzene	ND	1930	1740	ug/kg	90		SW846 8260B
	ND	1960	1810	ug/kg	93	4.2	SW846 8260B
Trichloroethene	ND	1930	1740	ug/kg	90		SW846 8260B
•	ND	1960	1770	ug/kg	90	1.8	SW846 8260B
Toluene	ND	1930	1760	ug/kg	91		SW846 8260B
	ND	1960	1760	ug/kg	90	0.42	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Dibromofluoromethane	91	(72 - 121)		
	92	(72 - 121)		
1,2-Dichloroethane-d4	86	(53 - 131)		
	88	(53 - 131)		
4-Bromofluorobenzene	98	(71 - 127)		
	100	(71 - 127)		
Toluene-d8	97	(57 - 130)	•	
	99	(57 - 130)		
And the second of the second o				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D1K150281 Work Order #...: EPDK41AC Matrix.....: SOLID

LCS Lot-Sample#: D1K210000-202

Prep Date....: 11/21/01 Analysis Date..: 11/25/01 Prep Batch #...: 1325202 Analysis Time..: 15:45

Dilution Factor: 1

	PERCENT	RECOVERY		
PARAMETER	RECOVERY	LIMITS	METHOD	_
Acenaphthene	71	(49 - 93)	SW846 8270C	
Pyrene	74	(48 - 97)	SW846 8270C	*
4-Chloro-3-methylphenol	73	(52 - 93)	SW846 8270C	
2-Chlorophenol	74	(51 - 91)	SW846 8270C	
1,4-Dichlorobenzene	67	(46 - 86)	SW846 8270C	
2,4-Dinitrotoluene	73	(53 - 105)	SW846 8270C	
4-Nitrophenol	68	(29 - 115)	SW846 8270C	
N-Nitrosodi-n-propyl- amine	71 .	(46 - 86)	SW846 8270C	
Pentachlorophenol	68	(27 - 97)	SW846 8270C	
Phenol	74	(50 - 90)	SW846 8270C	
1,2,4-Trichloro-	70	(49 - 90)	SW846 8270C	
benzene				
		PERCENT	RECOVERY	
SURROGATE	1.	RECOVERY	LIMITS	•
2-Fluorophenol		74	(34 - 97)	
Phenol-d5		74 .	(39 - 90)	
Nitrobenzene-d5		73	(33 - 97)	
2-Fluorobiphenyl		72	(39 - 91)	
2,4,6-Tribromophenol		71	(29 - 95)	•
Terphenyl-d14		79	(30 - 102)	

MOTER (S)

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D1K150281 Work Order #...: EPDK41AC

Matrix..... SOLID

LCS Lot-Sample#: D1K210000-202

Prep Date....: 11/21/01 Prep Batch #...: 1325202

Analysis Date..: 11/25/01 Analysis Time..: 15:45

Dilution Factor: 1

	SPIKE	MEASURED		PERCENT	
PARAMETER	AMOUNT	AMOUNT	UNITS	RECOVERY	METHOD
Acenaphthene	3330	2370	ug/kg	71	SW846 8270C
Pyrene	3330	2460	ug/kg	74	SW846 8270C
4-Chloro-3-methylphenol	5000	3650	ug/kg	73	SW846 8270C
2-Chlorophenol	5000	3720	ug/kg	74	SW846 8270C
1,4-Dichlorobenzene	3330	2240	ug/kg	67	SW846 8270C
2,4-Dinitrotoluene	3330	2430	ug/kg	73	SW846 8270C
4-Nitrophenol	5000	3390	ug/kg	68	SW846 8270C
N-Nitrosodi-n-propyl-	. 3330	2370	ug/kg	71	SW846 8270C
amine					•
Pentachlorophenol	5000	3400	ug/kg	68	SW846 8270C
Phenol	5000	3680	ug/kg	74	SW846 8270C
1,2,4-Trichloro-	3330	2330	ug/kg	70	SW846 8270C
benzene	·		- · -		

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
2-Fluorophenol	74	(34 - 97)
Phenol-d5	74	(39 - 90)
Nitrobenzene-d5	73	(33 - 97)
2-Fluorobiphenyl	72	(39 - 91)
2,4,6-Tribromophenol	71	(29 - 95)
Terphenyl-d14	79	(30 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D1K150281

Work Order #...: EPDK41AA

Matrix..... SOLID

MB Lot-Sample #: D1K210000-202

Prep Date....: 11/21/01 Prep Batch #...: 1325202

Analysis Time..: 15:22

METHOD

SW846 8270C

SW846 8270C

SW846 8270C

SW846 8270C

Analysis Date..: 11/25/01

Dilution Factor: 1

PARAMETER

Acenaphthene

REPORTING <u>LIM</u>IT UNITS RESULT ND 330 ug/kg ND 330 ug/kg ND 330 ug/kg ND 330 ug/kg

Acenaphthylene SW846 8270C Anthracene SW846 8270C Benzo(a) anthracene 330 ug/kg SW846 8270C Benzo (b) fluoranthene ND SW846 8270C Benzo(k) fluoranthene 330 ug/kg ND SW846 8270C 330 ug/kg ND Benzo(ghi)perylene 330 ug/kg SW846 8270C Benzo(a) pyrene ND ND 330 ug/kg SW846 8270C Chrysene SW846 8270C ND 330 ug/kg Dibenz(a,h)anthracene SW846 8270C 330 ug/kg Fluoranthene ND ND 330 ug/kg SW846 8270C Fluorene ND 330 ug/kg SW846 8270C Indeno(1,2,3-cd)pyrene SW846 8270C ND 330 ug/kg Naphthalene SW846 8270C ND 330 ug/kg Phenanthrene

330

330

ug/kg

ug/kg

phthalate SW846 8270C ND 330 ug/kg Dimethyl phthalate PERCENT RECOVERY SURROGATE RECOVERY LIMITS

ND

ND

DUMOGATE	112001211				
2-Fluorophenol	71	(34 - 97)			
Phenol-d5	69	(39 - 90)			
Nitrobenzene-d5	70	(33 - 97)			
2-Fluorobiphenyl	68	(39 - 91)			
2,4,6-Tribromophenol	63	(29 - 95)			
Terphenyl-d14	76	(30 - 102)			

NOTE(S):

Pyrene

bis(2-Ethylhexyl)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D1K150281 Work Order #...: ENQ141AP-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-004

ENQ141AQ-MSD

 Date Sampled...:
 11/09/01 09:20 Date Received...:
 11/10/01

 Prep Date.....:
 11/21/01 Analysis Date...:
 11/25/01

 Prep Batch #...:
 1325202 Analysis Time...:
 18:04

Dilution Factor: 1 % Moisture....: 18

	PERCENT	RECOVERY .		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
Acenaphthene	66	(49 - 93)			SW846 8270C
	66	(49 - 93)	0.42	(0-40)	SW846 8270C
Pyrene	64	(48 - 97)			SW846 8270C
	68	(48 - 97)	7.0	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	67	(52 - 93)			SW846 8270C
	68	(52 - 93)	0.72	(0-40)	SW846 8270C
2-Chlorophenol	68	(51 - 91)			SW846 8270C
	69	(51 - 91)	1.6	(0-36)	SW846 8270C
1,4-Dichlorobenzene	62	(46 - 86)			SW846 8270C
,	61	(46 - 86)	2.5	(0-40)	SW846 8270C
2,4-Dinitrotoluene	70	(53 - 105)			SW846 8270C
	66	(53 - 105)	5.6	(0-40)	SW846 8270C
4-Nitrophenol	58 -	(29 - 115)			SW846 8270C
	60	(29 - 115)	3.2	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-	67	(46 - 86)			SW846 8270C
amine		•			
	67	(46 - 86)	0.60	(0-40)	SW846 8270C
Pentachlorophenol	60	(27 - 97)			SW846 8270C
	64	(27 - 97)	6.1	(0-40)	SW846 8270C
Phenol	67	(50 - 90)			SW846 8270C
	67	(50 - 90)	0.48	(0-37)	SW846 8270C
1,2,4-Trichloro- benzene	63	(49 - 90)			SW846 8270C
	63	(49 - 90)	1.2	(0-40)	SW846 8270C
		PERCENT		RECOVERY	•
SURROGATE	_	RECOVERY		LIMITS	
2-Fluorophenol		68		(34 - 97)	
	•	66		(34 - 97)	
Phenol-d5		67		(39 - 90)	
		65		(39 - 90)	
Nitrobenzene-d5		66		(33 - 97)	
		67		(33 - 97)	
2-Fluorobiphenyl		65		(39 - 91)	
		65		(39 - 91)	
2,4,6-Tribromophenol		68		(29 - 95)	*
				/	

(Continued on next page)

(29 - 95)

67

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D1K150281 Work Order #...: ENQ141AP-MS Matrix......

MS Lot-Sample #: D1K120137-004 ENQ141AQ-MSD

SURROGATE	·	PERCENT RECOVERY	RECOVERY LIMITS	
Terphenyl-d14	4.	66 67	(30 - 102) (30 - 102)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D1K150281 Work Order #...: ENQ141AP-MS Matrix.....: SOLID

MS Lot-Sample #: D1K120137-004 ENQ141AQ-MSD

 Date Sampled...:
 11/09/01 09:20 Date Received...:
 11/10/01

 Prep Date.....:
 11/21/01 Analysis Date...:
 11/25/01

 Prep Batch #...:
 1325202 Analysis Time...:
 18:04

Dilution Factor: 1 % Moisture....: 18

	SAMPLE	SPIKE	MEASRD		PERCENT			
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHO	D
Acenaphthene	ND	3330	2210	ug/kg	66		SW846	8270C
•	ND	3330	2200	ug/kg	66	0.42	SW846	8270C
Pyrene	ND	3330	2120	ug/kg	64			8270C
	ND	3330	2280	ug/kg	68	7.0	SW846	8270C
4-Chloro-3-methylphenol	ND	5000	3360	ug/kg	67		SW846	8270C
	ND	5000	3380	ug/kg	68	0.72	SW846	8270C
2-Chlorophenol	ND	5000	3380	ug/kg	68		SW846	8270C
	ND	5000	3440	ug/kg	69	1.6	SW846	8270C
1,4-Dichlorobenzene	ND	3330	2070	ug/kg	62		SW846	8270C
•	ND	3330	2020	ug/kg	61	2.5	SW846	8270C
2,4-Dinitrotoluene	ND	3330	2320	ug/kg	70 %		SW846	8270C
	ND	3330	2190	ug/kg	66	5.6	SW846	8270C
4-Nitrophenol	ND	5000	2920	ug/kg	58		SW846	8270C
	ND	5000	3010	ug/kg	60	3.2	SW846	8270C
N-Nitrosodi-n-propyl- amine	ND	3330	2250	ug/kg	67		SW846	8270C
	ND	3330	2240	ug/kg	67	0.60	SW846	8270C
Pentachlorophenol	ND	5000	3010	ug/kg	60		SW846	8270C
• •	ND	5000	3200	ug/kg	64	6.1	SW846	8270C
Phenol	ND	5000	3330	ug/kg	67		SW846	
	ND	5000	3350	ug/kg	67	0.48	SW846	8270C
1,2,4-Trichloro- benzene	ND	3330	2110	ug/kg	63		SW846	8270C
	ND .	3330	2080	ug/kg	63	1.2	SW846	8270C
SURROGATE			PERCENT	_	RECOVERY			
2-Fluorophenol	-		RECOVERY	<u> </u>	LIMITS	_		
z-ridorophenor			68		(34 - 97)			
Phenol-d5	2		66		(34 - 97)			
11101101-03			67 67		(39 - 90)			
Nitrobenzene-d5			65		(39 - 90)			
MICTODEIIZEIIE-UD			66		(33 - 97)			

(Continued on next page)

(33 - 97)

(39 - 91)

(39 - 91)

(29 - 95)

(29 - 95)

67

65

65

68

67

2-Fluorobiphenyl

2,4,6-Tribromophenol

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D1K150281

Work Order #...: ENQ141AP-MS

Matrix....: SOLID

MS Lot-Sample #: D1K120137-004

ENQ141AQ-MSD

SURROGATE	PERCENT . RECOVERY	RECOVERY LIMITS
Terphenyl-d14	66 67	(30 - 102) (30 - 102)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #:	D1K150281			Matrix	: SOLID
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: Barium	D1K200000-	566 Prep Ba (86 - 114) Dilution Facto Analysis Time.	or: 1	11/20-11/27/01	EPC3Q1AJ
Chromium	94	(88 - 110) Dilution Facto Analysis Time.	- · -	11/20-11/27/01	EPC3Q1AK
Silver	90	(88 - 108) Dilution Facto Analysis Time.		11/20-11/27/01	EPC3Q1AL
Arsenic	90	(87 - 107) Dilution Facto Analysis Time.		11/20-11/27/01	EPC3Q1AM
Cadmium	93	(89 - 109) Dilution Factor Analysis Time.		11/20-11/27/01	EPC3Q1AN
Lead		(88 - 108) Dilution Factor Analysis Time.		11/20-11/27/01	EPC3Q1AP
Selenium		(86 - 107) Dilution Factor Analysis Time.	r: 1	11/20-11/27/01	EPC3Q1AQ

Calculations are performed before rounding to avoid round-off errors in calculated results.

NOTE(S):

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #	: D1K	(150281				· .	Matrix:	SOLID
	SPIKE	MEASURI		PERCNT			PREPARATION-	WORK
PARAMETER	AMOUNT	TRUOMA	UNITS	RECVRY	METHOI)	ANALYSIS DATE	ORDER #
	2 11 345		566 P P-t	_1_ 11	1204			
_		180	566 Prep Bat mg/kg	90		6010B	11/20-11/27/01	EDC3 () 1 N.T
Barium	200	180	mg/kg Dilution Factor	7, 1	2W040		11/20-11/27/01	Hrejoim
			Analysis Time					
			Analysis lime	. 10.55			•	
Chromium	20.0	18.8	mg/kg	94	SW846	6010B	11/20-11/27/01	EPC3Q1AK
		*	Dilution Factor	: 1				
			Analysis Time	: 16:33				
			<u>-</u>					
Silver	5.00	4.52	mg/kg	90	SW846	6010B	11/20-11/27/01	EPC3Q1AL
			Dilution Factor	: 1				
			Analysis Time	: 16:33		•	•	•
Arsenic	200	180	mg/kg	90	SW846	6010B	11/20-11/27/01	EPC3Q1AM
			Dilution Factor					
			Analysis Time	: 16:33				
			. /1 -	0.0	G110.4.6	6010D	11/00 11/07/01	EDGOOLAN
Cadmium	5.00	4.67	mg/kg	93	SW846	6010B	11/20-11/27/01	EPC3QIAN
			Dilution Factor	-				
			Analysis Time	: 16:33				
Lead	50.0	47.3	mg/kg	95	SW846	6010B	11/20-11/27/01	EPC3O1AP
пеаа	30.0	47.5	Dilution Factor		511010	00102	11/20 11/2//01	51 65 61111
			Analysis Time				•	
			raidry 525 rime	. 20.33			•	
Selenium	200	180	mg/kg	90	SW846	6010B	11/20-11/27/01	EPC3Q1AQ
			Dilution Factor	: 1				
		,	Analysis Time	: 16:33				
NOTE(S):			·					_

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: D1K150281

Matrix..... SOLID

	PERCENT	RECOVERY		RPD		PREPARATION-	PREP-
. PARAMETER	RECOVERY	LIMITS	RPD	LIMITS -	METHOD	ANALYSIS DATE	BATCH #
Mercury	103	(82 - 113)			SW846 7471A	11/26/01	1324368
	102	(82 - 113)	0.45	(0-20)	SW846 7471A	11/26/01	1324368
		Dilutio	on Fact	or: 1			

NOTE(S):

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: D1K150281

Matrix....: SOLID

	SPIKE	MEASURED	•	PERCNT				PREPARATION-	PREP
PARAMETER	AMOUNT	AMOUNT	UNITS	RECVRY	<u>RPD</u>	METHOD		ANALYSIS DATE	BATCH #
Mercury	0.417	0.428	mg/kg	103		SW846 7471	LA	11/26/01	1324368
•	0.417	0.426	mg/kg	102	0.45	SW846 7471	LA	11/26/01	1324368
		n.	:lunian Bac	.tor. 1					

NOTE(S):

METHOD BLANK REPORT

TOTAL Metals

Client Lot #: D1K150281	•	Matrix:	: SOLID
-------------------------	---	---------	---------

PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample Mercury	#: D1K200000 ND	0-368 Prep Batch #: 0.033 mg/kg Dilution Factor: 1 Analysis Time: 20:09	1324368 SW846 7471A	11/26/01	EPAW91AA
					• .
MB Lot-Sample Arsenic	#: D1K200000 ND	1.0 mg/kg Dilution Factor: 1 Analysis Time: 16:28	1324566 SW846 6010B	11/20-11/27/01	EPC3Q1AE
Barium	ND	1.0 mg/kg Dilution Factor: 1 Analysis Time: 16:28	SW846 6010B	11/20-11/27/01	EPC3Q1AA
Cadmium	ND	0.50 mg/kg Dilution Factor: 1 Analysis Time: 16:28	SW846 6010B	11/20-11/27/01	EPC3Q1AF
Chromium	ND	1.0 mg/kg Dilution Factor: 1 Analysis Time: 16:28	SW846 6010B	11/20-11/27/01	EPC3Q1AC
Lead	ND	0.80 mg/kg Dilution Factor: 1 Analysis Time: 16:28	SW846 6010B	11/20-11/27/01	EPC3Q1AG
Selenium ,	ND	1.3 mg/kg Dilution Factor: 1 Analysis Time: 16:28	SW846 6010B	11/20-11/27/01	EPC3Q1AH
Silver	ND	1.0 mg/kg Dilution Factor: 1 Analysis Time: 16:28	SW846 6010B	11/20-11/27/01	EPC3Q1AD
NOTE(S):					

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot # Date Sampled		0281 2/01 08:15 Date	Received	: 11/	14/01	Matrix	:.SOLID
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS RPD	RPD LIMITS	METHO	D	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sampl	Le #: D1K15	0281-001 Prep	Batch #	.: 132	4566		
Arsenic	95	(87 - 107)	,		6010B	11/20-11/27/01	EN3AJ1A0
	93	(87 - 107) 1.9 Dilution Factorial Analysis Times			6010B	11/20-11/27/01	
						•	
Barium .	92	(86 - 114)		SW846	6010B	11/20-11/27/01	EN3AJ1AR
	90	(86 - 114) 1.3	(0-20)	SW846	6010B	11/20-11/27/01	EN3AJ1AT
		Dilution Fac Analysis Tir				•	
Cadmium	93	(89 - 109)		SW846	6010B	11/20-11/27/01	EN3AJ1A2
,	92	(89 - 109) 0.7 Dilution Fac Analysis Tim	tor: 1		6010B	11/20-11/27/01	¥
Chromium	102	(88 - 110)		SW846	6010B	11/20-11/27/01	ENSATIAL
·	97	(88 - 110) 2.2 Dilution Fac Analysis Tim	tor: 1		6010B	11/20-11/27/01	
Lead	97	(88 - 108) '		SW846	6010B	11/20-11/27/01	מוד הכונים
	96	(88 - 108) 0.82 Dilution Fac	tor: 1	SW846	6010B	11/20 11/27/01	
		Analysis Tim	e: 16:47				
Selenium	95	(86 - 107)		SW846	6010B	11/20-11/27/01	EN3AJ1A6
	94	(86 - 107) 1.4 Dilution Factorial Analysis Times	tor: 1		6010B	11/20-11/27/01	
			*				
Silver	94	(88 - 108)			6010B	11/20-11/27/01	
· ·	93	(88 - 108) 1.1 Dilution Fac Analysis Tim	tor: 1	SW846	6010B	11/20-11/27/01	EN3AJ1AX
•		radiyala 11m	C 16:47				

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

PARAMETER A MS Lot-Samp Arsenic	SAMPLE AMOUNT ple #:	SPIKE	/01 08:15 MEASURED AMOUNT	Date Recei	ved: PERCN		01		•	
MS Lot-Samp Arsenic	AMOUNT			•	PERCN					
MS Lot-Samp Arsenic	AMOUNT					1.1.		•	PREPARATION-	WORK
Arsenic				UNITS		Y RPD	METHO	D	ANALYSIS DATE	ORDER #
Arsenic								*		
	- -	D1K15	0281-001	Prep Batch	#:	132456	6			
			105		0.5					·
_	5.5 5.5	200	195 191	mg/kg mg/kg	95 93			6010B 6010B	11/20-11/27/01	
	,,,	200		ing/kg ition Factor: 1		1.9	5W846	POTOR	11/20-11/27/01	ENSAUTAL
				lysis Time: 1	-					,
			4	-,	,				•	
Barium										
1	.65	200	349	mg/kg	92		SW846	6010B	11/20-11/27/01	EN3AJ1AR
1	-65	200	345	mg/kg	90	1.3	SW846	6010B	11/20-11/27/01	EN3AJ1AT
				tion Factor: 1					•	
			Anal	ysis Time: 1	.6:47				* .	
Cadmium										
	ID	5.00	4.65	mg/kg	93		CWOAC	6010B	11/20-11/27/01	ר ב ד ב כננים
N		5.00	4.62	mg/kg	92	0 71	SW846		11/20-11/27/01	
				tion Factor: 1		0.71	DWO10		11/20-11/27/01	ENDAUTAD
) ·			Anal	ysis Time: 1	6:47					
•										
Chromium										
			41.7	mg/kg	102			6010B	11/20-11/27/01	
2	1.3	20.0	40.8	mg/kg	97	2.2	SW846	6010B	11/20-11/27/01	EN3AJ1AV
				tion Factor: 1						
			Alldi	ysis Time: 1	6:4/					
Lead			,		•					
1	0.4	50.0	58.7	mg/kg	97	· .	SW846	6010B	11/20-11/27/01	EN3AJ1A4
1	0.4	50.0	58.2	mg/kg	96	0.82	SW846	6010B	11/20-11/27/01	
			Dilu	tion Factor: 1						
			Anal	ysis Time: 1	6:47			•		
				•						
Selenium.	<u> </u>	200	102	/ / / / / / / / / / / / / / / /	0.5		G110.4.6	60105		
, NI			191 188	mg/kg mg/kg	95 04			6010B	11/20-11/27/01	
, 141		200		tion Factor: 1	94	1.4	SW846	POTOR	11/20-11/27/01	EN3AJIA7
				ysis Time: 1				•		
									<i>a</i>	
Silver										
NI	D!		4.70	mg/kg	94		SW846	6010B	11/20-11/27/01	EN3AJ1AW
NI	D !	5.00	4.65	mg/kg	93	1.1	SW846	6010B	11/20-11/27/01	EN3AJ1AX
				tion Factor: 1						
			Anal	ysis Time: 1	6:47					•
NOTE(S):										

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D1K150281

Date Sampled...: 11/06/01 15:00 Date Received..: 11/08/01

PERCENT RECOVERY RPD PREPARATION-WORK

RECOVERY LIMITS RPD LIMITS ORDER # ANALYSIS DATE

MS Lot-Sample #: D1K090131-002 Prep Batch #...: 1324368

Mercury 96 (82 - 113)11/26/01 ENMC91FD 96 (82 - 113) 0.17 (0-20) SW846 7471A 11/26/01

> Dilution Factor: 1 Analysis Time..: 20:16

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

ENMC91FE

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D1K150281 Matrix.....: SOLID

Date Sampled...: 11/06/01 15:00 Date Received..: 11/08/01

SAMPLE SPIKE MEASURED PERCNT PREPARATION- WORK

PARAMETER AMOUNT AMT AMOUNT UNITS RECVRY RPD METHOD ANALYSIS DATE ORDER #

MS Lot-Sample #: D1K090131-002 Prep Batch #...: 1324368

Mercury

ND 0.417 0.411 mg/kg 96 SW846 7471A 11/26/01 ENMC91FD

ND 0.417 0.411 mg/kg 96 0.17 SW846 7471A 11/26/01 ENMC91FE

Dilution Factor: 1

Analysis Time..: 20:16

NOTE(S):

HOLD TIME REPORT

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GCMS VOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif		Ext Hold	Ana Hold	Extraction Date		Analysis Date		Method Description
D1K150281001	B-68-4	11/12/01										
		;	8260B		8		14			11/20/01 1	1:58	VOA
D1K150281003	B-68-19	11/12/01	08:45								,	
			8260B		8		14			11/20/01 1	4:08	VOA
D1K150281004	B-69-3	11/12/01	11:00									
			8260B		8		14	••		11/20/01 1	3:16	VCA
D1K150281005	B-69-15	11/12/01	11:15									
			8260B		8		14	*		11/20/01 1	3:41	VOA.
D1K150281006	B-77-5	11/12/01	12:00					Ÿ.				
			8260B		8		14			11/20/01 1	4:37	VOA
D1K150281007	B-77-16	11/12/01	12:15		*		2					
			8260B		8		14			11/20/01 1	4:33	VOA
D1K150281008	B-77-19	11/12/01	12:20					•				
•			8260B		8		14	•		- 11/20/01 1	4:74	WTA.
D1K150281009	B-59-3	11/12/01	13:30									k.
			8260B	,	. 8		14			11/20/01 1	4:59	VOA
D1K150281010	B-59-15	11/12/01 1	14:10									
			8260B		8		14		٠	11/20/01 1	5:24	VCA
D1K150281012	B-107-3	11/12/01 1	L4:00			• .					,	
			8260B		8		14			11/20/01 1	Sit.	VLA
D1K150281013	B-108-16	11/12/01 1	12:15									:
			9260B		8	•	14					7 A
D1K150281014	B-63-0.5	11/12/01 1	14:10								,	· •
			8260B		8		14			11/23/31 1	r:41	715
D1K150281015	B-63-11	11/12/01 1	4:20									
·			8260B		8		14			11 2:1 1.	-;];	70a
			82608		9		14			11 2		
D1K150281016	B-63-19	11/12/01 1	4:30									
			82603		8		14			11/20/11/11	 	7.A
D1K150281017	B-63-20	11/12/01 1	4:35									
			8260B		8		14			11/20.51 1:	:::,	70A
D1K150281018	B-80-1	11/12/01 1	4:55					*				
			8260B		8		14			11/20/91 17	7:5s	VCA
D1K150281019	B-80-15	11/12/01 1	5:05									
			82603		8		14			11/20/01 18	:24	VOA
01K150281020	B-80-17	11/12/01 1	5:10								,	•
			8260B		8		14			-11/20/71 19	5:26	VCA
50281021	B-83-1	11/12/01 1	5:45								-	
	•		8260B		8		14			11/20/01 18	2:50	VOA
D1K150281022	B-83-15	11/12/01 1	5:55	•								
			8260B		8		14			17/20/01 19	نم د د د	voz 1 (

CAMERON-COLE LLC

Wichita, KS

HOLD TIME REPORT

Lab: GCMS VOA

Lab ID #	Well ID	Collection Date	Method	Ext Dif	Ana Dif	Ext Hold	Ana Hold	Extraction Date	Analysis Date	Method Description
D1K150281023	B-83-17	11/12/01 16	5:05							
			8260B		8		14	7	11/20/01 15:	50 VOA
D1K150281024 -	B-109-15	11/12/01 16	5:00					•	•	
			8260B		8		14		11/20/01 19:	42 VCA

CAMERON-COLE LLC

Wichita, KS

HOLD TIME REPORT

Lab: GCMS SEMIVOA

Lab ID #	Well ID	Collection Date	Method			Ext Hold	Ana Hold	Extraction Date		Analysis Date		Method Description
D1K150281001	B-68-4	11/12/01	08:15									
		-	8270C	. 9	4	14	40	11/21/01	08:30	11/25/01	21:31	BNAs
D1K150281002	B-68-16	11/12/01	08:30									
			8270C	9	4	14	40	11/21/01	08:30	11/25/01	21:54	BNAs
D1K150281011	B-105-16	11/12/01	13:00	*								
			8270C	9	. 4	14	40	11/21/01	08:30	11/25/01	22:17	BNAs

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: METALS

Lab ID #	Well ID	Collection Date		Ext Dif	Ana Dif	Ext Hold	Ana Hold	Extraction Date	Analysis / Date	Method Description
D1K150281001	B-68-4	11/12/01	08:15						,	
			6010B		15		180	•	11/27/01 16:3	38 ICP
		vi	6010B		15		180		11/27/01 16:3	S8 ICP
			7471A		14		28		11/26/01 20:2	23
D1K150281002	B-68-16	11/12/01	08:30							
•			6010B		15		180		11/27/01 16:5	7 ICP
			6010B		15		180		11/27/01 16:5	7 ICP
			7471A		14		28		11/26/01 20:2	
D1K150281004	B-69-3 ·	11/12/01	11:00							
• .			6010B		15		180	:	11/17/01 1":0	1 Jua
	. *		6010B		15		180		11/27/01 17:0	2 ICP
			7471A		14		28		11/26/01 20:2	
D1K150281005	B-69-15	11/12/01	11:15					4		
			6010B		15		180		11/27/01 17:0	7 ICP
			6010B		15		180		11/27/01 17:0	
			7471A		14		28		11/26/01 20:2	
D1K150281011	B-105-16	11/12/01	13:00							
		Ŧ	6010B		15		180		11/27/01 17:1	2 ICP
			6010B		1.5		180	-	11/27/01 17:1	_
			7471A		14		28		11/26/01 20:3	
D1K150281014	B-63-0.5	11/12/01	14:10							
			6010B		15		180		11/27/01 17:2	E IOP
			6010B		15		180			5 ICP
			7471A		14		28		11/26/01 20:31	
D1K150281015	B-63-11	11/12/01	14:20					٠		-
			6010B		15		180	•		. ITP
			6010B		15		180		11/27/31 17:31	
		i	7471A		14		28		11/28/71 27:34	
D1K150281016	B-63-19	11/12/01	14:30						•	
		1	,6010B		15		180		11/27/61 17:38	- /
			6010B		15		180		11/27/81 17:36	
		;	7471A		14		28			
		î.							11/26/01 20:30	

CAMERON-COLE LLC Wichita, KS

HOLD TIME REPORT

Lab: GENERAL CHEMISTRY

Lab ID #	Well ID	Collection Date	Method	Ext Dif			Ana Hold		Analysis Date		Method Description
D1K150281001	B-68-4	11/12/01	08:15					*.	•		
·			160.3 MOD		15	•	99		11/27/01	15:00	
D1K150281002	B-68-16	11/12/01	08:30								
			160.3 MOD		15		99		11/27/01	15:00	
D1K150281004	B-69-3	11/12/01	11:00		•						•
•			160.3 MOD		15		99	•	11/27/01	15:00	
D1K150281005	B-69-15	11/12/01	11:15								
			160.3 MOD	ı	`15		99		11/27/01	15:00	
D1K150281006	B-77-5	11/12/01	12:00				-				•
			160.3 MOD	ı	15		99		11/27/01	15:00	
D1K150281007	B-77-16	11/12/01	12:15			•					•
			160.3 MOD		15		99		11/27/01	15:00	
D1K150281009	B-59-3	11/12/01	13:30	•	•						
			160.3 MOD	ı	15		99		11/27/01	15:00	
D1K150281010	B-59-15	11/12/01	14:10								
			160.3 MOD	ı	15	•	99		11/27/01	15:00	
D1K150281011	B-105-16	11/12/01	13:00								
		,	160.3 MOD	٠.,	15		99		11/27/01	15:00	•
D1K150281012	B-107-3	11/12/01	14:00							•	
			160.3 MOD		15		99		11/27/01	16:33	*
D1K150281013	B-108-16	11/12/01									
			[160.3 MOD	ı	15		àè		** ** **	14:	•
D1K150281014	B-63-0.5	11/12/01	14:10								
			160.3 MOD	•	15		99		11. 17 '01	1::	
D1K150281015	B-63-11	11/12/01	14:23								
*			160.3 MOD)	15		99.		11/27/31	. : : : : :	
D1K150281016	B-63-19							•			
			. 160.3 MOD	,	15		àè		11/27/01		
D1K150281018	B-80-1	,,								•	
	•		160.3 MOD	•	15		99	•	11 27		•
D1K150281019	B-80-15	11/12/01									
			160.3 MOD		15		99		11/27 /1	:	
D1K150281021	B-83-1	11/12/01	15:45								
,	D 02 77		160.3 MOD	<i>)</i>	15		99	**	11/27/31	15:3.	
D1K150281022	8-83-12	11/12/01	• •	,	1 5		0.0			,	
	D_100 15	11/10/01	160.3 MOD				99		11/27/31	15:10	:
50281024	8-103-12	11/12/01	16:00 HOE			-	99				
	,		190.3 MCE	,	1.5		ככ		**, **	11:10	

Chain of Custody Record

STL Denver 4955 Yarrow Street Arvada, CO 80002







STL-4124 (0700) DEN (0900)					•										SER	VICE	S	S	ėve	ern	Tr	ent	Labor	atorie	s, Inc
Client Safety-Kleen (Wichta) In Address 2549 North New York August City Wichta Project Name and Location (State) S-K Wichta F. J. J. J. J. J. J. J. J. J. J. J. J. J.	ic. Facili	F. Proje	ct Mana Kn	ger 7	Aus	Lei	. (Car	m v	. A-			 /				Date		1/3				hain of Custoo	ly Number	
2549 North New York Au	ande	Telep	hone N	imber	(Area	Code).	Fax	lumbe	ei	٠, ء	<u> </u>	رت	_t_ _				Lab I					+	0411	_	
City State Zi	p Code	Site C	Contact	<i>35</i>	<u>-))</u>	<u>33</u>	ab Co	ntact		<u> </u>	} -	<u> </u>	2	2		Anal	VSIS I	Attac	h list	ıl		Pi	age	of _	
Project Name and Location (State)	0/2/9	Ki i	r/Wavh	ill Num	to of		Kae) ر	ان ہے کا	lev	•	}-	_	Т	\top'	nore	spac	e is n	eede	ii)		 -			
S-K Wich to Facility Wich to	Ks														ار		1								
1205-2				Mati	rix			Con Pres				17	3 /	, ,	2776	-							Specia Conditi	al Instructions of Rec	ons/ ceipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line	Date	Time	A.	Aqueous Sed	100	30000		_	_		ZnAc NaOH		Kefe Water		144										
B-108 -16	11/12/61	1215		4 0	X	1) =	I	Ι	×	12 N		> <u>~</u> Y	5 5	+	+	╀			-	+	+	····		
B.63 - 0.5	11/12/01	1410		+	X	1	2				- -				-	+	-		+	+	- -	+			
B-63-11	11/12/41	1420		_	x	2						— <u>'</u> —	岩	+	+	-	-	\dashv	-	+	-	+-			
B-63-19 B-63-20	"/12/01	1430	11	+-	x	2	+				-	$+\hat{\lambda}$	-	- -	+	╀		-	+	+	-	++		-	
B-63.20	"/12/01	1435		7		+	1		3	\dashv		\ \ \	4	+	+	+-	-	\dashv	+	-	-	\vdash			
B-80-1	11/12/01	1455		+	X	1,	1		-	\dashv	_	X		+	╁	+-	-	-	\dashv		-				
B-80-15	11/12/01	1505		_	X	1			7	\dashv	+	$\frac{1}{\lambda}$		+	+	-	-	\dashv	-	+-	-	$\vdash \vdash$			
B-80-17	11/12/61	1514	X			Ť		\vdash	3	\dashv	-	$\frac{1}{x}$	┥	+	+-	+	\vdash	-	+	+	-	\vdash			
B-83 · 1	11/12/61				X	1		_	-	\dashv	\dashv		-	+	-	+	$\left \cdot \right $	-	-		┼	-			
B-83-15	11/12/01			1	X	1		+	\dashv	\dashv	\dashv	TV	+	+	+	\vdash	-		+		-	$\vdash \vdash$			-
B-83-17	11/12/01			+	X	₹	Avc	+	3	\dashv	+	12	-	╁	+	-		_	-	1	-	$\vdash \vdash$			
B-109-15	11/12/61	1600			X	7		+	+	:= :			╁	╀	+	+	\vdash	_			-	1	· · · · · · · · · · · · · · · · · · ·		
Possible Hazard Identification		1		ple Dis	posal		L_I	L		ĻL		14		L	Щ.	نـــا					لــــــــــــــــــــــــــــــــــــــ	Щ			-
Non-Hazard	Poison B	Unknown		Return	To Cho	int	D D					Arc	hive	For .			Monti	is lo	A lee i Inger	may b than 3	e ass 3 mon	essed iths)	ıf samples are	retained	
1. Relinquished By	ays 🔲 21 Day	rs 🗌 Oth	er				OC F	Requi	reme	nts (Specii	fy)													
- Theles award		Date f1//	101	Tin	ie Fu		1. Re	eceive	ed By	Ī	0:	<u> </u>		ζ						<u>.</u>		Da	ate	Time	
2. Relinquished By		Date	<u>-</u>	Tin			2. Re	ceive	ed By				<u> </u>	<u>ر</u>		·		<u></u>	-			Da	nte .	Time	
3. Relinquished By		Date		Tin	ne			zeive		~		n		a.	14							1	1/14/01	1015	•
Comments							J. 119	poor V C	עם טי						,							Da	le /	Time	
1- Please coll Kay Tauscher DIO RIBUTION: WHITE - Stays with the Sample; CANARY	with my	, Gue	tion							_					,		-				•		·	<u> </u>	
CANARY WHITE - Stays with the Sample; CANARY	Y - Returned to Cl	ient with Rep	ort; PIN	K - Fie	ld Cop	<u>у</u>																			

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO. B-45

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Pat Martin METHOD: Geo Probe START DATE: 11-8-01 COMP. DATE: 11-8-01 SURF. EL .: TD: 16.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 15 FT, BGS WELL GRAPHIC LOG DPT SAMPLE SAMPLE DESCRIPTION DIAGRAM OVM USCS CODE ID ANALYSIS 0.0'-1.0' Fill Gravel parking lot material Silty clay, very dark brown (IOYR2/2), silt 40%, clay 60%, stiff, CL/ML dry, no stain, no odor. 5.0 B-45-4 0850 Clayey silt, light brown (7.5YR6/4), slit 80%, clay 20%, stiff. dry, no stain, no odor. CL/ML 10.8 10 10.0'-14.0' Silty sand, brownish yellow (IOYR6/8), sand 75% (fine), silt 25%, moist, no stain, no odor. SM 6.4 B-45-14 0905 CL NA Clay with silt, light brownish gray (10YR6/2), silt 15%, clay 85%, moist, no stain, no odor. SP 1.0 15.0'-16.0' Sand, brownish yellow (IOYR6/8), sand IOO% (fine), wet, no stain. no odor. Total Depth = 16.0 feet Groundwater sample collected from 14-16' 20-Sample ID: B-45-15 0915 25 30 **OB NUMBER: 1205**

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO. B-46

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: METHOD: Geo Probe Pat Martin START DATE: 11-8-01 COMP. DATE: 11-8-01 SURF. EL .: TD: 16.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 14 FT. BGS WELL **GRAPHIC LOG** SAMPLE SAMPLE DPT DESCRIPTION OVM DIAGRAM USCS CODE ANALYSIS ΙD 0.0'-1.0' FIII NA Gravel parking lot material 22.5 B-46-2 Silty clay, very dark brown (IOYR2/2), silt 40%, clay 60%, stiff, 0935 dry, no stain, no odor. 5. 5.5'-10.0' 25.2 Clayey silt, light brown (7.5YR6/4), silt 80%, clay 20%, stiff, dry, no stain, no odor. 10-10.0'-13.0' B-46-13 47.6 Silty sand, brownish yellow (IOYR6/8), sand 75% (fine), silt 25%, 0950 7.1 SM moist, no stain, no odor. 13.0'-14.0' CL NΑ Clay with slit, light brownish gray (10YR6/2), slit 15%, clay 85%, moist/wet, no stain, no odor. 4.6 SP Sand, brownish yellow (10YR6/8), sand 100% (fine), wet, no stain, no odor. Total Depth = 16.0 feet Groundwater sample collected from 14-16' Sample ID: B-46-17 1000 20-25 30 IOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page I of I

WELL NO. B-47

								T			
CLIENT:		afety-Kleen						JOB NO.:	1205	· 	
PROJECT	Γ: /	RFI Phase Il	Inves	tigatio		LOCATIO		Wichita, Ka			
DRILLED	BY	: EPS			DRILLER:	Pat Martin				o Probe	
START [DATE	E: 11-8-01	СОМР	. DATE	: 11-8-01	SURF. EL.:				O FT. BG	
LOGGED	BY:	JAN		MEAS.	PT ELEV.:			D. T. WAT	ER: 14	T	
WELL DIAGRAM	DPT			DESCRI	PTION	,		GRAPHIC LOG USCS CODE	OVM	SAMPLE ID	SAMPLE ANALYS
		•									
	+	0.0'-1.0'					F	FII	I NA		
	+	Gravel parking lo	t materia	<u> </u>			1		3.5	B-47-3	
	٦	Silty clay, very	dark brow	n (10YR2/2	?), silt 40%, clay (80%, stiff,		/////////CL/	41	1100	ļ
		dry, no stain,	ilo odor.		·				,,,		
	5—								4		
:	Ĭ-			.5YR6/4), s	siit 80%, clay 20%	, stiff,			3.8		
-	4	dry, no stain,	no odor.								
.	\dashv			•	• *			//////////////////////////////////////	CL		
	-				•					1	
	10-										
		11.0'-14.0' Silty sand, brow moist, no stali			3), sand 75% (fine	e), silt 25%,		SI	3.5	B-47-14 1115	
	15	14.0'-14.5' Clay with silt, lig moist/wet, no			DYR6/2), silt 15%,	clay 85%,	/	CI S	7,,		
		14.5'-17.0' Sand, brownish no odor.	yellow (10)YR6/B), sa	nd 100% (fine), w	et, no stain,	/				
		Total Depth = 1	7.0 feet	,							
	20-	Groundwater sa Sample ID: 112	B-47-16	cted from	15-17'		. !				
			•								
		•									
	25-							•			
	-										
	-									-	
	20	a.						•			
	30-										
JOB NUMBER	: 1205	<u></u>									

LOG

BORING NO.

CONSULTING

Page I of I

WELL NO.-B-48

CLIENT:	5	afety-Kleen	(Wichita). Inc.	<u> </u>		JOB	NO.:	1205	<u></u>	
PROJECT		RFI Phase II				LOCATION		a, Kar		*	
DRILLED					RILLER:	Pat Martin				o Probe	
		E: 11-9-01	COMP. D			SURF. EL.:) FT. BG	 SS
OGGED	,		<u> </u>		ELEV.:	I	р. т	. WAT	ER: <i>16</i>	FT. BG	 S
WELL							GRAPHI		ОУМ	SAMPLE	SAMPLE
DIAGRAM	DPT			SCRIPTI	UN		uscs	CODE	OVM	ID	ANALYS:
			.k		· .						
	-	0.0'-1.0'	· · · · · ·				 	<u> </u>	NA NA		
	\dashv	4" concrete, 8"	basecourse			/	1//////		15.1	B-48-3	
		1.0'-5.0' Silty clay, very	dark brown (10	0YR2/2), sll	t 65%, clay 3	5%, stiff,				0920	
	\exists	dry, no stain,						ML/CI		ļ	
	-										
	5	5.0'-10.0'					11.11.11	<u> </u>	1		
	7	Sandy silt, brown no stain, no o		sand 30% (fine), siit 70%	, dry,	11.1111	.[:]	13.8		•
	┥					,		· SM			
	┪				,			$\cdot []$			
					•			\cdot			
	10-	10.0'-13.0'		-			11.11.11	. -	1		
	\exists	Silty sand, brown no stain, no o		sand 80% (fine), silt 20%	, dry,		. SM			
	٦										
	7	13.0'-15.5'					- - - - - - - - - - 		22.5	B-48-14	
	,_	Sand, brown (10 no odor.	YR5/4), sand	100% (fine)	, moist, no st	ain,		SP		0940	
į	15	14.5'-19.0'							-		
	7	Sand, brown (10		100% (medi	um to coarse), wet,			17.6		
		no stain, no o	dor.					∷ SP			
											[.
	20-	Total Depth = 19	9.0 feet								
ľ	_''	Groundwater sai		from 17-19							
		Sample ID: 09		•				4			
					,						
	_					· •			Ì		
	25-	,									
									1		
	_		-								
İ	_				. •						
	_									,	
	30-										
		-				÷					
 :B NUMBER		,	•							· .	

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO.-B-49

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS METHOD: Geo Probe DRILLER: Pat Martin START DATE: 11-7-01 COMP. DATE: 11-7-01 SURF. EL .: TD: 16.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 15 FT. BGS WELL **GRAPHIC LOG** SAMPLE SAMPLE DPT DESCRIPTION MVO DIAGRAM USCS CODE ID ANALYSIS 0.0'-1.0' NA 4" concrete, 8" basecourse 5.6 B-49-4 0825 1620 Clayey silt, very dark brown (IOYR2/2), silt 70%, clay 30%, stiff, 11/8/01 dry, no stain, no odor. PAH 6.4 Silty sand, brown (10YR5/4), sand 65% (fine), silt 35%, dry, no stain, no odor. SM 11.7 10-Sand with slit, brown (10YR5/4), sand 85% (fine), silt 15%, dry, no stain, no odor. SP 13.0'-16.0' 5.0 B-49-15 Sand, brown (IOYR5/4), sand IOO% (fine), moist, no stain, 1635 no odor. SP 15-11/8/01 PAH Bottom 5" - coarse sand, wet, no stain, no odor. 0835 Total Depth = 16.0 feet . 20-25 30-IOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page I of I

CLIENT: S	Safety-Kleen	(Wichita), I	nc.		JOB NO		1205		
	RFI Phase II			LOCATION:					
ORILLED BY			DRILLER:	Pat Martin	MET			Probe	
	E: 11-9-01	COMP. DAT	E: 11-9-01	SURF. EL.:				FT. BG	
OGGED BY	: JAN	MEAS	. PT ELEV.:		D. T. W	ATE	R: <i>16</i>	FT. BG	
WELL DPT		DESCI	RIPTION		GRAPHIC L USCS COL		OVM	SAMPLE ID	SAMPLE ANALYSI
15. 15. 20 JOB NUMBER: 12	John Stain, no of Sandy silt, brown no stain, no of Sand, brown (10 no stain, no of Sand, brown (11 no stain, no of Sand, brown (12 no stain, no of Sand).	dark brown (10Yino odor. n (10YR5/4), sand dor. OYR5/4), sand 957 OYR5/4), sand 100 odor.	130% (fine), slit 70% (fine), slit 70% (medium to coars	x , dry, y, no stain,		ML/CL SP	119.3 29.3 15.1	B-50-4 1030	DUP B-100-4 1330 (VOCS)

LOG

BORING NO.

CONSULTING

Page I of I

CLIENT	S	afety–Kleen (Wichita), Inc.	JOB NO.:	1205		
PROJEC	T:	RFI Phase II Investigation LOCATION:	Wichita, Ka	ansas		
DRILLE) BY	: EPS DRILLER: Pat Martin	метн	DD: Ge	o Probe	
START	DAT	E: 11-7-01 COMP. DATE: 11-7-01 SURF. EL.:		TD: 16.0	FT. BG	S
LOGGED	BY:	: JAN MEAS. PT ELEV.:	D. T. WA	TER: 15	FT. BG	S
WELL DIAGRAM	DPT		GRAPHIC LOG USCS CODE	ОУМ	SAMPLE ID	SAMPLE ANALYSIS
	5	0.0'-5.0' Clayey silt, very dark brown (10YR2/2), silt 75%, clay 25%, stiff, dry, no stain, no odor. 5.0'-8.0' Clayey silt, brown (10YR5/4), sand 85% (fine), silt 15%, dry, no stain, no odor. 8.0'-14.0' Silty sand, brown (10YR5/4), sand 80% (fine), silt 20%, moist, no stain, no odor. 14.0'-15.0' Sand, gray (7.5YR5/4), sand 100% (medium to coarse), moist, stained, odor. 15.0'-16.0' Sand, brown (10YR5/4), sand 100% (medium to fine), wet, no stain,	ML/	4.8 - 3.2	B-51-4 1545 B-51-15 1555	
JOB NUMBEF	20	Total Depth = 16.0 feet				

LOG

BORING NO.

CONSULTING

Page I of 1

WELL NO. B-52

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas METHOD: Geo Probe DRILLED BY: EPS DRILLER: Pat Martin TD: 16.0 FT. BGS COMP. DATE: 11-7-01 SURF. EL .: START DATE: 11-7-01 MEAS. PT ELEV .: D. T. WATER: 14 FT. BGS LOGGED BY: JAN GRAPHIC LOG SAMPLE SAMPLE WELL DPT DESCRIPTION OVM USCS CODE DIAGRAM ID ANALYSIS 0.0'-4.0' 7.4 B-52-4 Clayey silt, very dark brown (IOYR2/2), silt 75%, clay 25%, stiff, 1520 dry, no stain, no odor. 4.0'-10.0' 6.8 Clayey silt, brown (10YR5/4), silt 65%, clay 35%, stiff, dry, no stain, no odor. ML/CL 17.0 10 Silty clay, gray (7.5YRN5), silt 15%, clay 85%, plastic, moist, no stain, odor. 11.5'-14.0' SP Silty sand, gray (7.5YRN5), sand 80%, silt 20%, moist, odor. V 87.2 B-52-15 14.0'-18.0' 00.00 1535 Sand, gray (7.5YRN5), sand 100% (medium to fine), wet, odor. 15-SW 0. .00 .00 Total Depth = 16.0 feet 20-25 30 IOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO. -B-53

JOB NO.: CLIENT: 1205 Safety-Kleen (Wichita), Inc. LOCATION: Wichita, Kansas PROJECT: RFI Phase II Investigation METHOD: Geo Probe DRILLER: Pat Martin DRILLED BY: *EPS* TD: 20.0 FT. BGS START DATE: 11-7-01 COMP. DATE: 11-7-01 SURF. EL .: D. T. WATER: 19 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: **GRAPHIC LOG** SAMPLE SAMPLE WELL DPT DESCRIPTION OVM USCS CODE ANALYSIS . ID DIAGRAM 0.0'-4.0' Silty sand with gravel, light brown (10YR6/3), gravel 15% (fine), sand 60%, silt 25%, moist, no stain, no odor. FIII B-53-5 74 4.0'-8.0' 0815 Silty clay, dark brown (10YR4/4), silt 10%, clay 90%, stiff, moist, no stain, no odor. ML/CL 13.7 8.0'-11.0' Silty clay, brown (7.5YR5/2), silt 35%, clay 65%, moist, ML/CL no stain, no odor. 10-11.0'-12.0' SP Sand, pale yellow (2.5YR7/3), sand 100% (fine), moist, NA no stain, no odor. 12.0'-16.0' Pushed cobble, no recovery. 15-B-53-17 3.2 16.0'-19.0' 0845 Sand, pale yellow (2.5Y7/3), sand 100% (fine to coarse), wet, no stain, odor in saturated zone. SP 4.0 SW 00:00 Gravelly sand, dark gray (7.5YRN4), sand 80% (fine to coarse), 20gravel 20% (fine), wet, no stain, odor. Total Depth = 20.0 feet 25 30 JOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page I of I

		·											
CLIENT		JOB NO.: 1205											
PROJEC	Т:	RFI Phase II	Investig	gation	LOCA	TION:							
DRILLE	D BY	: EPS		DRILLER:	Pat Ma	rtin	METHOD: Geo Probe						
START	DAT	E: 11-7-01	СОМР. С	ATE: 11-7-01	SURF.	EL.:				O FT. BO			
LOGGE	BY:	: JAN	МЕ	EAS. PT ELEV.:			D. T. V	VATE	ER: 19	FT. BG	s 		
WELL DIAGRAM	DPT		01	ESCRIPTION			GRAPHIC USCS CO		о∨м	SAMPLE ID	SAMPLE ANALYSIS		
	_ _ _	sand 15% (med	dium to fine),	rown (10YR4/3), gravel silt 75%, dry, no stain, i 7.5YR2/3), dry, iron sta	no odor.			Fill CL/ML	13.3 0.2	B-54-4 0740			
	5	4.0'-8.0' Silty clay, dark dry, no stain,	no odor. n (7.5YR5/2),	34/4), silt 10%, clay 90% silt 25%, clay 75%, stif				ML/CL	3.2				
	15-	12.0'-16.0' Sand, pale yello no stain, no o Bottom 1.0 ft ve t" coarse san 3.5 ft.	odor. ery fine silty l		edium), dry,			SP	4.5	B-54-17			
	- -	16.0'-20.0' Sand, pale yello no stain, odo		, sand 100% (fine to co 1 zone.	arse), wet,			SP	1,8 (wet)	0800			
1	20-	Total Depth = 2	20.0 feet		 				7				
	25-					•							
	30-		Pite.			·							
JOB NUMBE	R: 1205	 5		•	~		£.						

LOG

BORING NO.

CONSULTING

Page I of I

WELL NO.-B-55

Safety-Kleen (Wichita), Inc. JOB NO .: 1205 CLIENT: RFI Phase II Investigation LOCATION: Wichita, Kansas PROJECT: DRILLER: METHOD: Geo Probe DRILLED BY: *EPS* Pat Martin COMP. DATE: 11-6-01 TD: 20.0 FT. BGS START DATE: 11-6-01 SURF. EL .: MEAS. PT ELEV .: D. T. WATER: 19 FT. BGS LOGGED BY: JAN SAMPLE GRAPHIC LOG SAMPLE WELL OVM DPT DESCRIPTION USCS CODE ANALYSIS DIAGRAM ΙD 0.0'-2.5' Silty sand with gravel, dark brown (IOYR4/3), gravel 10% (fine), SM/Fil sand 10% (fine), slit 80%, green stain at 2.5 ft, no odor, dry, probable fill. B-55-3 2.5'-4.0' 0740 CL/ML 3 or1 Silty clay, very dark brown (7.5YR2/3), silt 35%, clay 65%, 3.0 little iron staining, no odor, dry. @6ft Silty clay, very dark brown (7.5YR3/3), silt 35%, clay 65%, little iron staining, no odor, dry. 0.8 8.0'-12.0' @10ft Silty clay with sand, light yellowish brown (2.5YR6/3), sand 20%, sllt 30%, clay 50%, little iron staining, no odor, dry. 10-CL NK 12.0'-16.0' Sand, pale yellow (2.5YR7/3), sand 100% (fine to coarse), no stain, no odor, dry. SP 15 B-55-17 0.6 16.0'-20.0' 19.5' 17.5 Sand, pale yellow (2.5Y7/3), sand 100% (fine to coarse), stain 1615 at water top, hydrocarbon odor in saturated zone, wet. SP 20 Total Depth = 20.0 feet 25 30 IOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page I of I

								·
CLIENT			(Wichita), Inc.			1205		
PROJEC	T: F	RFI Phase II	Investigation	LOCATION:	Wichita, Kar		<u>.</u>	
DRILLE	D BY:	EPS		Pat Martin	METHO			· · · · · · · · · · · · · · · · · · ·
START	DATE	: 11-9-01	COMP. DATE: 11-9-01	SURF. EL.:			O FT. BO	
LOGGED	BY:	JAN	MEAS. PT ELEV.:		D. T. WATI	ER: <i>14</i>		S
WELL DIAGRAM	DPT		DESCRIPTION		GRAPHIC LOG USCS CODE	OVM	SAMPLE ID	SAMPLE ANALYS
	5	dry, no stain,	(7.5YRN8), silt 40%, clay 60%, stiff, m		CL/ML	7.8	B-56-3 0830	
	15—	16.0'-20.0' Sand, brown (7. no stain, no o		se), wet,	00000000000000000000000000000000000000	7.5	B-56-16 0845	
		at 1450	mple collected B-56-18 at 0850 and er level indicator, water at 13.5' ft.	Dup-B-102-18				
	25-							
JOB NUMBEI	30-		• **					

LOG

BORING NO.

CONSULTING

Page I of I

CLIENT: Sa	fety-Kleen	(Wichita), Inc.			J	OB N	D.:	1205			
PROJECT: R	FI Phase II	Investigation		LOCATION	N: Wic	Wichita, Kansas					
DRILLED BY:	EPS	ום	RILLER:	Pat Martin		MET	HOL): <i>Ge</i>	Probe		
START DATE	: 11-7-01	COMP. DATE: 11	-7-01	SURF. EL.:		TD: 16.0 FT. BGS					
LOGGED BY:	JAN	MEAS. PT	ELEV.:			. T. W	ATE	R: <i>14</i>	FT. BG	s	
WELL DIAGRAM DPT		DESCRIPTI	ON			PHIC L		оум	SAMPLE . ID	SAMPLE ANALYSIS	
5- - - 10- - - 15-	8.0'-14.0' Clayey silt, dark no stain, no od	ark brown (IOYR2/2), sil no odor. y, dark brown (7YR4/4), tain, no odor. brown (7YR4/4), silt 65 ior.	silt 45%, clay	y 55 % ,			FIII CL/ML CL/ML ML/CL	47.2	B-57-3 1404 B-57-15 1420		
20- - - - - - - 25- - - - 30-	Total Depth = 16	.O feet									

LOG

BORING NO.

CONSULTING

Page I of I

WELL NO.-B-58

JOB NO.: 1205 CLIENT: Safety-Kleen (Wichita), Inc. PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas METHOD: Geo Probe DRILLED BY: EPS DRILLER: Pat Martin TD: 16.0 FT. BGS COMP. DATE: 11-7-01 SURF. EL .: START DATE: 11-7-01 D. T. WATER: 14 FT. BGS MEAS. PT ELEV .: . LOGGED BY: JAN SAMPLE GRAPHIC LOG SAMPLE WELL DESCRIPTION OVM DPT USCS CODE ID ANALÝSIS DIAGRAM 0.0'-1.0' Fill Gravel parking lot material 7.2 B-58-3 1445 Silty clay, very dark brown (IOYR2/2), silt 20%, clay 80%, stiff, dry, no stain, no odor. 5. 8.2 Clayey silt, light brown (7YR6/4), silt 80%, clay 20%, stiff, dry, no stain, no odor. ML 5.3 10.0'-13.5' Silty sand, light brown (7.5YR6/4), sand 70% (fine), silt 30%, dry, no stain, no odor. SM 4.5 B-58-15 13.5'-16.0' 1500 Sand, light brown (7.5YR6/4), sand 100% (fine), wet, no stain, SP 15 no odor. Total Depth = 16.0 feet 20 25 30-IOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of 1

7		4								
CLIENT	: <i>S</i>	afety-Kleen	(Wichita)	, Inc.		JOB N	0.:	1205	· 	
PROJEC	T: .	RFI Phase II	Investig	ətion	LOCATION	: Wichita,	Kan	sas		
DRILLE	D BY	: EPS		DRILLER:	Doug	ME.	THOE): <i>Ge</i> (Probe	•
START	DATI	E: 11-12-01	COMP. D	ATE: 11-12-01	SURF. EL.:		TD	: 16.0	FT. BG	s
LOGGE	BY:	JAN	ME	AS. PT ELEV.:		D. T. V	VATE	R: 16	FT. BG	S
WELL DIAGRAM	DPT		DE	SCRIPTION	3	GRAPHIC USCS CO		оум	SAMPLE ID	SAMPL ANALYS
										<u> </u>
		0.0'-1.0' Concrete and b	asecourse			 			,	
	1.0'-3.0' Silty sand with gravel, brown (10YR5/4), gravel 10% (fine), sand 55%, silt 35%, chunks of concrete and glass. 3.0'-10.0' Clayey silt, very dark brown (7.5YR2/3), silt 70%, clay 30%, moist iron staining, no odor.						SM	17.7	B-59-3	
									1330	
							CL/ML	15.1		
	10-	10.0'-13.5'						12.7		
	-	Silty sand, gray no odor.	(7.5YR6/4), s	and 75%, silt 25%, dry, r	no stain,		SM		i	
	15-	13.5'-16.0' Sand, brown (II stained, odor	OYR5/4), sand , tip of spoon s	100% (medium to coarse	e), moist,		SP	6.8	B-59-15 1410	
	-	Total Depth = 1	6.0 feet				1			
	_									
	20-									
	-									-
	25-	•								-
-	-									
	30-					•			į	
JOB NUMBE	 R: 1205									

LOG

BORING NO.

CONSULTING

Page I of I

CLIENT: 5	Safety-Kleen	(Wict	nita), Inc.			JOB N	0.:	1205		
PROJECT:	RFI Phase II	Inve	stigation	LOCATIO	N: /	wichita,	Kar	nsas		
DRILLED B	Y:		DRILLER:			ME	тног	ס:		
START DAT	E: 11-9-01	COMF	P. DATE: 11-9-01	SURF. EL.:			TC	D: <i>21.0</i>	FT. BO	35
LOGGED BY	': JAN		MEAS. PT ELEV.:			D. T. V	VATE	ER: <i>17</i>	FT. BG	S
WELL DIAGRAM DPT			DESCRIPTION			RAPHIC L USCS CO		оум	SAMPLE ID	SAMPLE ANALYSIS
_										
- - - 5-	0.0'-1.0' Concrete and ba 1.0'-7.0' Clayey silt, very clay 35%, moist	dark gra	ayish brown (10YR3/2), silt 65	; x ,			CL/ML	17.9 17.1	B-60-1 1145 B-60-3 1150	
	7.0'-13.0' Sand, grayish bro	own (10Y	(R5/2), sand 95% (fine), slit <	<5 % , drv.				19.1 25.2		
10-	odor. 13.0'-16.0'		(IOYR5/2), sand 80% (fine),				SP	26.I 24.3	B-60-16 1210	
15—	dry, odor. 16.0'-18.0'						SP/ML			
- 20-	18.0'-21.0'		nd 100% (medium to coarse), to				SP	29.1		
-	Total Depth = 21. Groundwater sam Sample ID: B . 1220	ple collec 1–60–18	cted from 19-21'			<u> </u>		,		
25 - - -	·	· ·						•		
30— 300 JOB NUMBER: 1205										

LOG

BORING NO.

CONSULTING

Page 1 of 1

CLIENT		Safety-Kleen	(Wich	nita). Inc				JOB	NO ·	1205		
PROJEC		RFI Phase II		· · · · · · · · · · · · · · · · · ·	·	1.00	TION:	_			· · · · · · · · · · · · · · · · · · ·	
DRILLE			11116		DRILLER:						aDrat -	
		E: 11-7-01	COME	 P. DATE:		SURF.		IMI			oProbe	
LOGGED			COMP		T ELEV.:	SURF.	EL.:	Б. Т			O FT. B	
1	101	· JAN		MEAS. P	I ELEV.:			, \		ER: 15	.5 FT. E	T
WELL DIAGRAM	DPT		٠	DESCRIP	TION			GRAPHIC USCS C		OVM	SAMPLE ID	SAMPLE ANALYSI
						· · · · · · · · · · · · · · · · · · ·				 		
	4				 .					1		
	_	0.0'-5.0' Silty sand with gr	avel, bro	own (7.5YR5/	3), gravel 10 %	(fine),			· -	3.4	B-61-05	
	-	sand 50%, silt of brick present.	40 % , dry	, no stain, no	odor. Chunks	of glass	•				1012	
	-	•							Fill	6.6	B-61-4	
	-		•								1012	
	5-	5.0'-11.0'								1		
		Silty clay, dark b dry, no stain, n		5YR4/4), silt	15%, clay 85%,	stiff,						
										6.4		
		×							CL/ML	-		
	10-			•								•
	"—				<u> </u>					3.2		
	4	11.0'-12.0' Clayey silt, very p	pale bro	wn (IOYR7/3),	, silt 55%, clay	45%,	<i>/</i> -		ML/CL	. 3.2		
	\dashv	dry, no stain, n	o odor.				/		ML/CL	-	• .	
	15 🚽	Clayey silt, very j dry, no stain, n		wn (10YR7/3),	, silt 55%, clay	45%,			SP	4.0		
	10 \$	13.5'-16.0' Sand, brownish ye coarse 40%, dr			0% (fine), medi	um to				3.7	B-61-18 1040	
		16.0'-18.0'					·		SP SP	1	1040	
	\exists	Sand, brownish ye coarse 40%, we			UV% (Tine), me	aium to	/	0.000)	4.0		
	20-	18.0'-20.0' Gravelly sand, brosand 85% (med	ownish ye	ellow (IOYR6/ parse), wet. n	8), gravel 15% o stain, no odo	(fine),		00	q "			
		Total Depth = 20					/					,
	4			~	-			٠				
];	25-						,					
	4	,									٠,٠	
	\dashv											
. [-											
3	30-	,										
					•							•
OB NUMBER:	1205			•								

LOG

BORING NO.

CONSULTING

Page I of I

WELL NO. B-62

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Pat Martin METHOD: GeoProbe START DATE: 11-7-01 COMP. DATE: 11-7-01 SURF. EL .: TD: 20.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 17 FT. BGS WELL DPT **GRAPHIC LOG** SAMPLE SAMPLE DESCRIPTION OVM DIAGRAM USCS CODE ID ANALYSIS 0.0'-2.0' Silty sand with gravel, brown (7.5YR5/3), gravel 10% (fine), Fill 3.4 B-62-05 sand 50%, silt 40%, dry, no stain, no odor. 0930 4.2 B-62-5 Silty clay, dark brown (7.5YR4/4), silt 10%, clay 90%, stiff, 0935 CL/ML dry, iron stain, no odor. 3.2 4.0'-8.0' Silty clay, dark brown (7.5YR4/4), silt 10%, clay 90%, stiff, dry, iron stain, no odor. CL/ML 5.3 8.0'-11.0' Silty clay, dark brown (7.5YR4/3), silt 30%, clay 70%, stiff, dry, iron stain, no odor. 10-11.0'-12.0' NA ./ML/sp Interbedded sand (fine), silt, and clay layers, up to I" thick. 3.4 Sand, brownish yellow (IOYR6/6), sand 80% (fine), medium to coarse 20%, dry, iron stain, no odor. SP 15 7.2 B-62-17 16.0'-18.0' Sand, brownish yellow (IOYR6/6), sand 80% (fine), medium to 0955 SP coarse 20%, dry, iron stain, no odor. Fine lamination throughout. 12.2 00:00 18.0'-20.0' SW 0.:00:00 Sand with gravel, dark gray (7.5YRN4), sand 80% (fine to 20 coarse), gravel 20% (fine), wet, stained, odor. Total Depth = 20.0 feet 30 JOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page I of I

WELL NO.-B-63

Safety-Kleen (Wichita), Inc. JOB NO.: 1205 CLIENT: LOCATION: PROJECT: RFI Phase II Investigation Wichita, Kansas DRILLER: Doug METHOD: GeoProbe DRILLED BY: EPS COMP. DATE: 11-12-01 SURF. EL .: START DATE: 11-12-01 TD: 21.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV.: D. T. WATER: 19.5 FT. BGS GRAPHIC LOG WELL SAMPLE SAMPLE DPT оум DESCRIPTION USCS CODE DIAGRAM ID ANALYSIS 0.0'-10.5' Silty sand with gravel, brown (7.5YR5/4), gravel to% (fine), 12.8 B-63-05 sand 50%, silt 40%, dry, no stain, no odor. 1410 18.2 -bricks, glass, concrete, and metal debris FIII 10-18.2 B-63-II 10.5'-13.0' 1420 Clayey sllt, dark brown (7.5YR4/4), silt 70%, clay 30%, stiff, ML/CL dry, no stain, no odor. 9.0 Sand, pale yellow (2.5YR7/3), sand 100% (fine), dry, no stain, no odor. 15 SP 20-B-63-19 1430 Total Depth = 21.0 feet Groundwater sample collected from 19-21' Sample ID: B-63-20 1435 25-30-10B NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO.-B-64

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS Pat Martin DRILLER: METHOD: GeoProbe START DATE: 11-8-01 COMP. DATE: 11-8-01 SURF. EL .: TD: 17.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 16 FT. BGS WELL GRAPHIC LOG SAMPLE DPT SAMPLE DESCRIPTION оум DIAGRAM USCS CODE ANALYSIS ID 0.0'-2.5' Silty sand with gravel, black (10YR2/1), gravel 20% (fine). 6.2 B-64-05 ΕIII sand 50% (fine to coarse), silt 30%, dry, stained, odor. 1515 B-64-3 12.4 2.5'-6.0' 1520 Clayey silt, black (10YR2/1), silt 65%, clay 35%, moist, stained, odor. 5 13.7 6.0'-11.0' Clayey slit, yellowish brown (10YR5/6), slit 80%, clay 20%, dry, no stain, no odor. ML 10 11.0'-17.0' Silty sand, yellowish brown (10YR5/6), sand 85% (fine), silt 15%, moist, no stain, no odor. SP 13.3 15 B-64-16 1530 Total Depth = 17.0 feet 20 25-30-JOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of I

WELL NO. B-65

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Pat Martin METHOD: GeoProbe START DATE: 11-8-01 COMP. DATE: 11-8-01 SURF. EL .: TD: 17.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 16 FT. BGS WELL **GRAPHIC LOG** SAMPLE SAMPLE DPT DESCRIPTION DIAGRAM OVM USCS CODE ANALYSIS 0.0'-2.5' Silty sand with gravel, black (IOYR2/I), gravel 20% (fine), 10.5 B-65-05 FIII sand 50% (fine to coarse), silt 30%, dry, stained, odor. 1540 B-65-3 16.3 2.5'-6.0' 1540 Clayey silt, black (10YR2/1), silt 65%, clay 35%, moist. stained, odor. ML/CL 15.1 6.0'-11.0' Clayey silt, dark yellowish brown (10YR4/6), silt 80% (fine), clay 20%, dry, no stain, no odor. ML 10 11.0'-17.0' Silty sand, yellowish brown (10YR5/6), sand 85% (fine), silt 15%, moist/wet, no stain, no odor. SP 15 17.4 B-65-16 1555 Total Depth = 17.0 feet 20-30 10B NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO.-B-66

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: *EPS* DRILLER: Pat Martin METHOD: GeoProbe START DATE: 11-8-01 COMP. DATE: 11-8-01 SURF. EL .: TD: 17.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 17 FT. BGS WELL **GRAPHIC LOG** DPT SAMPLE SAMPLE DESCRIPTION OVM DIAGRAM USCS CODE ΙD ANALYSIS 0.0'-3.0' Silty sand with gravel, black (10YR2/1), gravel 15% (fine). 10.5 B-66-05 sand 65% (fine to coarse), silt 20%, dry, stained, odor. Fill 1630 3.0'-5.5' 15.7 B-66-3 Clayey silt, black (IOYR2/I), silt 70%, clay 30%, moist. 1630 stained, odor. 5 5.5'-10.0' 5.3 Clayey silt, dark yellowish brown (IOYR4/6), silt 80%, clay 20%, dry, no stain, no odor. ML 10-8.7 10.0'-13.5' Silty sand, yellowish brown (IOYR5/6), sand 85% (fine), silt 15%, moist, no stain, no odor. SP 13.5'-17.0' 4.7 B-66-16 Sand, yellowish brown (IOYR5/6), sand 95% (fine), silt <5%, 1640 15moist, no stain, no odor. SP Tip of spoon was wet Total Depth = 17.0 feet 20-30 JOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO.-B-67

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Pat Martin METHOD: GeoProbe START DATE: 11-8-01 COMP. DATE: 11-8-01 SURF. EL .: TD: 17.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 17 FT. BGS WELL GRAPHIC LOG SAMPLE DPT SAMPLE DESCRIPTION OVM DIAGRAM USCS CODE ID ANALYSIS 0.0'-3.0' Silty sand with gravel, black (10YR2/1), gravel 15% (fine). 14.5 B-67-05 sand 65% (fine to coarse), silt 20%, dry, stained, odor. Fill 1650 3.0'-6.0' 15.4 B-67-3 1650 Clayey silt, black (IOYR2/1), silt 70%, clay 30%, moist, stained, odor. 16.2 6.0'-10.0' Clayey silt, dark yellowish brown (IOYR5/6), sand 80% (fine), clay 20%, dry, no stain, no odor. ML 10-9.8 10.0'-14.0' Silty sand, yellowish brown (IOYR5/6), sand 85% (fine). silt 15%, moist, no stain. SP 10.2 B-67-15 14.0'-17.0' Sand, yellowish brown (10YR5/6), sand 95% (fine), silt <5%, 1645 moist, no stain, no odor. SP Tip of sampler was saturated Total Depth = 17.0 feet 20 30-10B NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page I of I

WELL NO. B-68

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Pat Martin METHOD: GeoProbe START DATE: 11-12-01 COMP. DATE: 11-12-01 SURF. EL .: TD: 25.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 18 FT. BGS WELL GRAPHIC LOG SAMPLE SAMPLE DPT DESCRIPTION OVM DIAGRAM USCS CODE ANALYSIS 0.0'-1.0' 5" concrete, 7" basecourse 23.1 B-68-4 0815 ML/CL Clayey silt, very dark brown (10YR2/2), silt 65%, clay 35%. stiff, moist, no stain, odor. 35.3 Clayey silt, gray (10YR5/1), silt 70%, clay 30%, stiff, dry, no stain, odor. 10-Silty sand, gray (10YR5/1), sand 70% (fine), silt 30%, dry, no stain, odor. 162.0 B-68-16 B-105-16 0830 1300 123.9 16.0'-25.0' Sand, brown (IOYR5/4), sand IOO% (fine), wet, no stain, odor. 20-20.3 SP 25 Total Depth = 25.0 feet Groundwater sample collected from 18-20' Sample ID: B-68-19 0845 Installed 1-inch well to 25ft with 10ft of .01 slot screen, 15ft of pvc riser 30 IOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page I of I

WELL NO. B-69

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Doug METHOD: GeoProbe COMP. DATE: 11-12-01 START DATE: 11-12-01 SURF. EL .: TD: 20.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 17 FT. BGS WELL GRAPHIC LOG SAMPLE SAMPLE DPT DESCRIPTION OVM DIAGRAM USCS CODE ID ANALYSIS Silty sand with gravel, brown (10YR5/4), gravel 10% (fine), sand 55%, silt 35%, dry, no stain, no odor, chunks of Fill concrete and glass. B-69-3 4.7 B-107-3 3.0'-10.0' 1100 1400 Clayey silt, very dark brown (7.5YR2/3), silt 70%, clay 30%. moist, iron staining, no odor. ML/CL 10 10.0'-14.0' Silty sand, gray (10YR1/5), sand 75%, silt 25%, dry, no stain, no odor. SM 3" gray stained layer at lift with odor 8.1 B-69-15 12.59 1115 15 Sand, brown (IOYR5/4), sand 100% (medium to coarse), moist to wet, stained, odor. SP 20-Total Depth = 20.0 feet Groundwater sample collected from 17-19' Sample ID: B-69-18 1125 25 30 JOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO. B-70

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Pat Martin METHOD: GeoProbe START DATE: 11-7-01 COMP. DATE: 11-7-01 SURF. EL .: TD: 20.0 FT. BGS LOGGED BY: *JAN* MEAS. PT ELEV .: D. T. WATER: 18 FT. BGS WELL GRAPHIC LOG DPT SAMPLE SAMPLE DESCRIPTION OVM DIAGRAM USCS CODE ΙD ANALYSIS 0.0'-4.0' Silty sand with gravel, brown (7.5YR5/3), gravel 15%, B-70-05 4.8 sand 50%, silt 35%, dry, no stain, no odor, chunks of 1130 FIII B-70-8 4.0'-8.0' 6.6 5 Silty sand with gravel, brown (7.5YR5/3), gravel 15%, sand 50%, 1105 silt 35%, dry, no stain, no odor, chunks of brick and glass. FIII 8.0'-12.0' 4.7 Silty clay, very dark brown (7.5YR2/3), silt 10%, clay 90%, stiff, dry, no stain, no odor. 10-12.0'-14.0' NA Silty clay, very dark brown (7.5YR2/3), silt 10%, clay 90%, stiff, dry, no stain, no odor. 5.0 15 Sand, pale brown (10YR6/3), sand 100% (fine to medium), dry, no stain, no odor. SP 18.0'-20.0' 3.6 B-70-18 0.0.0.0 Gravelly sand, brownish yellow (10YR6/8), gravel 15% (fine), 1145 SW 0.0000 sand 85% (medium to coarse), wet, no stain, no odor. 20 Total Depth = 20.0 feet 30 JOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO.-B-76

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Pat Martin METHOD: GeoProbe START DATE: 11-8-01 COMP. DATE: 11-8-01 SURF. EL .: TD: 16.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 12 FT. BGS WELL DPT GRAPHIC LOG SAMPLE SAMPLE DESCRIPTION DIAGRAM OVM USCS CODE ΙD ANALYSIS 0.0'-8.0' Silty clay, dark brown (7YR4/4), silt 45%, clay 55%, stiff, 4.6 B-76-4 dry, no stain, no odor. 1130 3.1 8.0'-15.0' 20.0 Silty clay, gray (7.5YRI/6), silt 45%, clay 55%, stiff, dry, no stain, no odor. 10-54.5 B-76-15 15 1350 2000 Gravelly sand, brown (7.5YR7/3), sand 80% (medium to coarse), gravel 20% (fine), wet, no stain, no odor. Total Depth = 16.0 feet Note: used water level inidcator and water was at 12.0 ft in borehole. 20-30-IOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page I of I

WELL NO.-B-77

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Doug METHOD: GeoProbe START DATE: 11-12-01 COMP. DATE: 11-12-01 SURF. EL .: TD: 20.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 17 FT. BGS WELL GRAPHIC LOG DPT SAMPLE SAMPLE DESCRIPTION OVM DIAGRAM USCS CODE ID ANALYSIS 0.0'-4.5' Silty sand with gravel, brown (10YR5/4), gravel 10% (fine), sand 55%, silt 35%, dry, no stain, no odor, chunks of concrete and glass. 8.7 B-77-5 14.8 5. Clayey silt, very dark brown (7.5YR2/3), silt 70%, clay 30%, 1200 moist, iron staining, no odor. ML/CL 16.3 10 B-77-16 B-108-16 Silty sand, gray (IOYRI/5), sand 75%, silt 25%, dry, stained, 1215 1430 SM 15 15.5'-20.0' 9.3 Sand, brown (10YR5/4), sand 100% (medium to coarse), moist/wet, stained, odor. SP 20-Total Depth = 20.0 feet Groundwater sample collected from 18-20' Sample ID: B-77-19 1220 30. 10B NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO.-B-78

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Pat Martin METHOD: GeoProbe START DATE: 11-8-01 COMP. DATE: 11-8-01 SURF. EL .: TD: 21.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 17.5 FT. BGS WELL GRAPHIC LOG SAMPLE SAMPLE DPT DESCRIPTION ОУМ DIAGRAM USCS CODE ANALYSIS ID 0.0'-1.5' Fill Concrete and gravel basecourse 6.B Clayey silt, very dark brown (IOYR2/2), silt 75%, clay 25% ML/CL stiff, dry, no stain, no odor. 5.3 4.5'-10.0' Clayey silt, brown (7.5YR5/3), silt 80%, clay 20%, stiff, dry, no stain, no odor. ML/CL 10 10.4 10.0'-17.0' Silty sand, brown (7.5YR5/3), sand 70% (fine), silt 30%, moist, no stain, no odor. SM 15 17.6 17.0'-21.0' Sand, brown (7.5YR5/3), sand 95% (fine), silt <5%, wet, no stain, no odor. SP 20-Total Depth = 21.0 feet Groundwater sample collected from 19-21' Sample ID: B-78-20 1200 25 30 JOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of 1

CLIENT: 5	Safety-Kleen	(Wichita), Ind	c.		JOB N	10.:	1205	,	
PROJECT:	RFI Phase II	Investigatio	n	LOCATION:	Wichita	, Kar	nsas		
DRILLED B	Y: EPS		DRILLER:	Pat Martin	ME	ТНОІ	D: <i>Ge</i>	oProbe	
START DAT	E: 11-8-01	COMP. DATE:	: 11-8-01	SURF. EL.:		T	D: <i>21.0</i>) FT. BG	s
LOGGED BY	: JAN	MEAS. I	PT ELEV.:		р. т.	WATI	ER: 17	.5 FT. B	es .
WELL DIAGRAM DPT		DESCRI	PTION		GRAPHIC USCS CO		оум	SAMPLE ID	SAMPLE ANALYSIS
5— 5— 10— 15—	stiff, dry, no sta 5.5'-10.0' Clayey silt, brown dry, no stain, no 10.0'-16.5' Silty sand, brown moist, no stain,	fark brown (IOYR2/3ain, no odor. (7.5YR5/3), silt 803 odor. (7.5YR5/3), sand 70 no odor.	%, clay 20%, stiff,			Fill ML/CL ML/CL	4.7		
20— — — — 25— — — — 30—	Total Depth = 21.0) feet le collected from 19	I-21'			SP			

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO.-B-80

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Pat Martin METHOD: GeoProbe START DATE: 11-9-01 COMP. DATE: 11-9-01 SURF. EL .: TD: 17.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 16 FT. BGS WELL DPT GRAPHIC LOG SAMPLE SAMPLE DESCRIPTION DIAGRAM OVM USCS CODE ID ANALYSIS 0.0'-1.0' 5" concrete, 7" basecourse 11.5 B-80-1 1455 Clayey silt, very dark brown (IOYR3/2), silt 65%, clay 35%, moist, no stain, no odor. ML/CL 8.4 Sand grayish, brown (10YR5/2), sand 95% (fine), silt <5%. dry, no stain, no odor. 10-SP 7.1 11.1 B-80-15 13.0'-16.0' B-109-15 Silty sand, grayish brown (IOYR5/2), sand 80% (fine), 1505 1600 silt 20%, dry, appears degraded, odor. SM 15 16.0'-17.0' 9.7 SP Sand, gray (IOYR5/I), sand IOO% (coarse), wet, appears degraded, odor. Total Depth = 17.0 feet Groundwater sample collected from 16-18' 20 Sample ID: B-80-17 Made two attemps off west side of building. Encountered two slabs of concrete too thick to get through. Moved location off SW corner of building. Concrete is still too thick. Moved to south side of tracks off SW corner of building. 25 30 JOB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page I of I

S. 75.15		(1.11 - 1.11 - 1.1		TEEL ITO.	·		- :
CLIENT:		(Wichita), Inc.		JOB NO.:	1205		
PROJECT:		Investigation	LOCATION:	Wichita, Kar			
DRILLED			Pat Martin	METHO	D: <i>Ge</i>	oProbe	
	TE: 11-8-01	COMP. DATE: 11-8-01	SURF. EL.:		D: <i>21.0</i>) FT. BG	SS
LOGGED B	BY: JAN	MEAS. PT ELEV.:		D. T. WATE	ER: 18	8.5 FT. E	ses
WELL DIAGRAM	Т	DESCRIPTION		GRAPHIC LOG USCS CODE	о∨м	SAMPLE ID	SAMPLE ANALYSIS
20- 25- 30-	sand 20%, slit is 2.5'-9.5' Clayey silt, very dry, no stain, no stain, no stain, no slity sand, light y slity sand, light yellow medium), dry, no stain, no	rellowish brown (10YR6/3), sand 55% (o stain, no odor. sequence ish brown (2.5YR6/3), sand 100% (fine o stain, no odor. ish brown (2.5YR6/3), sand 100% (coa o odor.	35%, (fine),	FIII ML/CL SP	4.1 5.0 10.2 @Bft 9.9 @12ft 7.4 3.2 5.9	(in sat. zone)	

LOG

BORING NO.

CONSULTING

Page I of I

WELL NO. B-82

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Pat Martin METHOD: GeoProbe START DATE: 11-9-01 COMP. DATE: 11-9-01 SURF. EL .: TD: 20.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 18 FT. BGS WELL **GRAPHIC LOG** DPT SAMPLE SAMPLE DESCRIPTION DIAGRAM OVM USCS CODE ID ANALYSIS 0.0'-3.0' Silty sand with gravel, brown (7.5YR3/3), gravel 10% (fine), sand 20%, silt 70%, dry, no stain, no odor. Fill 9.3 3.0'-10.0' Clayey silt, very dark brown (7.5YR3/3), silt 65%, clay 35%, dry, no stain, no odor. 14.2 ML/CL 7.5 10.0'-13.0' Silty sand, light yellowish brown (2.5YR6/3), sand 65% (fine), silt 35%, dry, no stain, no odor. SM 13.0'~15.0' 8.7 Sand, light yellowish brown (2.5YR6/3), sand 100% (fine to SP medium), dry, no stain, no odor. Sand, light yellowish brown (2.5YR6/3), sand 100% (coarse), moist/wet, no stain, no odor. SP 8.5 (satur.) 20-Total Depth = 20.0 feet Groundwater sample Sample ID: B-82-18 1245 30-10B NUMBER: 1205

LOG

BORING NO.

CONSULTING .

Page 1 of 1

WELL NO.-B-83

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Pat Martin METHOD: GeoProbe START DATE: 11-12-01 COMP. DATE: 11-12-01 SURF. EL .: TD: 17.0 FT. BGS LOGGED BY: JAN MEAS. PT ELEV .: D. T. WATER: 16 FT. BGS WELL GRAPHIC LOG SAMPLE SAMPLE DPT DESCRIPTION OVM DIAGRAM USCS CODE ANALYSIS 0.0'-1.0' Concrete and basecourse 16.3 B-83-1 1545 Clayey silt, black, slit 65%, clay 35%, moist, no stain, no odor. Clayey silt, very dark grayish brown (10YR3/2), silt 65%, ML/CL 14.8 clay 35%, moist, no stain, no odor. 13.0 Sand, grayIsh brown (10YR5/2), sand 95% (fine), silt <5%, dry. 10-10.2 SP 15.1 B-83-15 13.5'-17.0' 1555 Sand, grayish brown (10YR5/2), sand 100% (fine), appears 15 degraded, odor. SP Total Depth = 17.0 feet Groundwater sample collected from 16-18' Sample ID: B-83-17 1605 20-25 30 10B NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of 2

WELL NO. SK-115

PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: Geotechnical Services DRILLER: Steve Gensten METHOD: H5A CME-45 START DATE: 11-9-01 COMP. DATE: 11-9-01 SURF. EL.: TD: 32.0 FT. BGS LOGGED BY: Philip Cavendor MEAS. PT ELEV.: D. T. WATER: 18 FT. BGS WELL DIAGRAM DPT DESCRIPTION GRAPHIC LOG OVM SAMPLE SAMPLE	PROJECT: RFI Phase II Investigation LOCATION: Wichtick, Kansas DRILLED BY: Geotechnical Services DRILLER: Steve Gensten METHOD: H5A CME-45 START DATE: II-9-01 COMP. DATE: II-9-01 SURF. EL.: TD: 32.0 FT. BGS START DATE: II-9-01 COMP. DATE: II-9-01 SURF. EL.: TD: 32.0 FT. BGS WELL DPT DESCRIPTION GRAPHIC LOG USCS CODE USCS	CLIENT:	Safaty Klass (Watt) 7			· · ·		
DRILLED BY: Geotechnical Services DRILLER: Steve Gensten METHOD: H5A CME-45 START DATE: II-9-01 COMP. DATE: II-9-01 SURF. EL.: TD: 32.0 FT. BGS LOGGED BY: Philip Cavendor MEAS. PT ELEV: D. T. WATER: IB FT. BGS WELL DPT DESCRIPTION GRAPHIC LOG OVM SAMPLE SAMPL	DRILLED BY: Geotechnical Services DRILLER: Steve Gensten METHOD: H5A CME-45 START DATE: 11-9-01 COMP. DATE: 11-9-01 SURF. EL.: TD: 32.0 FT. BGS LOGGED BY: Philip Cavendor MEAS. PT ELEV.: D. T. WATER: 18 FT. BGS WELL DATE: 11-9-01 DESCRIPTION GRAPHIC LOG OVM SAMPLE ANALY DESCRIPTION GRAPHIC LOG OVM SAMPLE ANALY O.O'-LO' Topsoil silly clay, dark brown, 80% sill, 40% clay, dry, no odor, no stain. CL. 10-1-5 Clay, dark brown, 80% clay, stiff, non-plastic, dry, no odor, no stain. CL. 7.5-12.0' Clayey sill, light yellowish brown, 55% sand, very fine gravel, 70% sill, 25% clay, non-plastic, dry, no odor, no stain. 10- 10- 10- 10- 10- 10- 10- 10- 10- 10		Safety-Kleen (Wichita), Inc.		JOB NO.:	1205	5	
START DATE: ## 19-01 COMP. DATE: ## 19-9-01 SURF. EL.: DESCRIPTION DESCRIPTION DESCRIPTION GRAPHIC LOG OVM SAMPLE SAMPLE OF TROOMS OF THE START	START DATE: #1-9-01 COMP. DATE: #1-9-01 SURF. EL.: D. T. WATER: #8 FT. BGS WELL DIAGRAM DPT DESCRIPTION GRAPHIC LOG OVM SAMPLE SAMP ANALY DESCRIPTION GRAPHIC LOG OVM SAMPLE SAMP ANALY O.0-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' Toposul, ally clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. 10-10' To			<u></u>		nsas		<u> </u>
D. T. WATER: 18 FT. BGS WELL DIAGRAM DPT DESCRIPTION GRAPHIC LOG USCS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE SAMPLE NO OVER TOPS CODE OVM SAMPLE NO OVER TOPS CODE OVM SAMPLE NO OVER TOPS CODE OVER T	WELL DPT DESCRIPTION GRAPHIC LOG USCS CODE OVM SAMPLE SAMPLE DIAGRAM DPT DESCRIPTION GRAPHIC LOG USCS CODE OVM SAMPLE SAMPLE DIAGRAM DPT Topooli, sity clay, dark brown, 80% siti, 40% clay, dry, no odor, no stain. 10-7-15' Clay, dark brown, 80% clay, sitif, non-plastic, dry, no odor, no stain. 10-7-15' Clay, dark brown, 80% clay, sitif, non-plastic, dry, no odor, no stain. 10-7-15' Clay, dark brown, 80% clay, sitif, non-plastic, dry, no odor, no stain. 11.5'-12.0' Clayvey siti, light yellow brown, 85% sand, very fine gravel, 70% siti, 25% clay, non-plastic, dry, no odor, no stain. 11.5'-12.0' Clayvey siti, light yellow brown, 85% sand (very fine gravel) medium, 30% siti, 5% clay, dry, no odor, no stain. 11.5'-12.0' Clayvey siti, light yellow brown, 85% sand (very fine gravel) medium, 30% siti, 5% clay, dry, no odor, no stain. 11.5'-12.0' Clayvey siti, light yellow brown, 85% sand (very fine gravel) medium, 30% siti, 5% clay, dry, no odor, no stain. 11.5'-12.0' Clayvey siti, light yellow brown, 85% sand (very fine to coarse), 10-12.0' Topooling sand sand, yellow brown, 85% sand (very fine to coarse), 11.5' SM (see the property graded sand, yellow brown, 85% sand (very fine to coarse), 11.5' SM (see the property graded sand, yellow brown, 70% gravel (rine to neclum), 35% sand (very fine to coarse), 5% sait, wet, no odor, no stain.				en METHO	D: <i>H5</i>	A CME-	45
DESCRIPTION GRAPHIC LOG USCS CODE OVM SAMPLE ANALYS: O.0L0' Topsoil, sity clay, dark brown, 80% silt, 40% clay, dry, no odor, no stain. OL 7.5'-12.0' Clay dark brown, 80% clay, stiff, non-plastic, dry, no odor, no stain. OL 7.5'-12.0' Clay gait, light yellowibh brown, 5% sand, very fine gravel, 70% silt, 25% clay, non-plastic, dry, no odor, no stain. ID IS.0'-18.0' Sandy silt, light yellow brown, 5% sand (very fine gravel to medium), 30% silt, 5% clay, dry, no odor, no stain. IS IS IS IS IS IS IS IS IS I	DESCRIPTION GRAPHIC LOG USCS CODE OVM SAMPLE ASAMPANALY Topsoil, sity clay, dark brown, 80% sit, 40% clay, dry, no odor, no stain. CL 1.0"-15" Clay, dark brown, 80% clay, stiff, non-plastic, dry, no odor, no stain. CL 7.5"-12.0" Clayey sitt, light yellowish brown, 5% sand, very fine gravel, 70% sitt, 25% clay, non-plastic, dry, no odor, no stain. ML 12.0"-18.0" Sandry sitt, light yellow brown, 65% sand (very fine gravel to medium), 30% sitt, 5% clay, dry, no odor, no stain. II.6 II.6 II.6 II.6 II.7.1 II.7.1 Poorly graded sand, yellow brown, 85% sand (very fine to coarse), rounded to sub-rounded quartz, 15% sitt, wet at approximately to feet, no odor, no stain. Poorly graded sand coarsening to SP 25- 26.0"-30.0" Poorly graded gravel with sand, yellowlah brown, 70% gravel (time to medium), 35% sand (very fine to coarse), 5% sitt, wet, no odor, no stain. CL 3.3.4 4.2 4.2 17.1 II.6 II.6 GRAPHIC LOG USCS CODE OVM SAMPLE SAMANALY A.2 4.2 4.2 4.2 II.6 II.6 II.6 II.6 II.6 II.6 II.6 II.6 II.6 II.7.1 II.7							
DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION DOWN SAMPLE ANALYS ANALYS 10 10 10 10 10 10 10 10 10 1	DESCRIPTION DESCRIPTION DESCRIPTION OVM SAMPLE SAMP ANALY Topocil, sity clay, dark brown, 80% silt, 40% clay, dry, no dodr, no stain. 1.07-7.5' Clay, dark brown, 80% clay, stiff, non-plastic, dry, no dodr, no stain. CL 7.6'-12.0' Claysey silt, light yellowish brown, 5% sand, very fine gravel, 70% silt, 25% clay, non-plastic, dry, no oddr, no stain. NL 12.0'-18.0' Sandy silt, light yellow brown, 65% sand (very fine gravel to medium), 30% silt, 5% clay, dry, no oddr, no stain. 15- 16- 18.0'-26.0' Poorty graded sand, yellow brown, 85% sand (very fine to coarse), rounded to sub-rounded quartz, 15% silt, wet at approximately (10 feet, no oddr, no stain. Poorty graded sand coarsening to 25- 28.0'-30.0' Poorty graded gravel with sand, yellowish brown, 70% gravel (fine to medium), 35% sand (very fine to coarse), 5% silt, wet, no oddr, no stain. 30- CC. 9.6 9.7 17.1 18.0'-26.0' Poorty graded gravel with sand, yellowish brown, 70% gravel (fine to medium), 35% sand (very fine to coarse), 5% silt, wet, no oddr, no stain.		: Philip Cavendor MEAS. PT ELE	<u> </u>	D. T. WAT	ER: 18	FT. BG	s
7.5'-12.0' Clayer silt, light yellowish brown, 5% sand, very fine gravel, 70% silt, 25% clay, non-plastic, dry, no odor, no stain. 12.0'-18.0' Sandy silt, light yellow brown, 85% sand (very fine gravel to medium), 30% silt, 5% clay, dry, no odor, no stain. 15- 18.0'-26.0' Poorty graded sand, yellow brown, 85% sand (very fine to coarse), rounded to sub-rounded quartz, 15% silt, wet at approximately 10 feet, no odor, no stain. Poorly graded sand coarsening to 25- 26.0'-30.0' Poorty graded gravel with sand, yellowish brown, 70% gravel (fine to medium), 35% sand (very fine to coarse), 5% silt, wet, no odor, no stain. 9,4 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4	7.5'-12.0' Clayey silt, light yellowish brown, 5% sand, very fine gravel, 70% silt, 25% clay, non-plastic, dry, no odor, no stain. 12.0'-18.0' Sandy silt, light yellow brown, 65% sand (very fine gravel to medium), 30% silt, 5% clay, dry, no odor, no stain. 15- 18.0'-26.0' Poorty graded sand, yellow brown, 85% sand (very fine to coarse), rounded to sub-rounded quartz, 15% silt, wet at approximately (10 feet, no odor, no stain. Poorly graded sand coarsening to 25- 28.0'-30.0' Poorty graded gravel with sand, yellowish brown, 70% gravel (fine to medium), 35% sand (very fine to coarse), 5% silt, wet, no odor, no stain. 6P 28.0'-30.0' Poorty graded gravel with sand, yellowish brown, 70% gravel (fine to medium), 35% sand (very fine to coarse), 5% silt, wet, no odor, no stain.		DESCRIPTION			ОУМ		SAMPLE ANALYSI
! ! ! ! ! ! !	NUMBER: 1205	10-	Topsoli, silty clay, dark brown, 60% silt, 40% clano odor, no stain. 1.0'-7.5' Clay, dark brown, 80% clay, stiff, non-plastic, dodor, no stain. 7.5'-12.0' Clayey silt, light yellowish brown, 5% sand, very 70% silt, 25% clay, non-plastic, dry, no odor, rown, silt, 25% clay, non-plastic, dry, no odor, rown, silt, 25% clay, non-plastic, dry, no odor, rown, silt, 18.0'-26.0' Sandy silt, light yellow brown, 65% sand (very film medium), 30% silt, 5% clay, dry, no odor, no stain. 18.0'-26.0' Poorly graded sand, yellow brown, 85% sand (very film to graded sand coarsening to	ry, no fine gravel, no stain. ne gravel to in. ry fine to coarse), t approximately	CL SP	4.2 11.6		

LOG

BORING NO.

CONSULTING

Page 2 of 2

WELL NO. SK-115

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: Geotechnical Services | DRILLER: Steve Gensten METHOD: H5A CME-45 START DATE: 11-9-01 COMP. DATE: 11-9-01 SURF. EL .: TD: 32.0 FT. BGS LOGGED BY: Philip Cavendor MEAS. PT ELEV .: D. T. WATER: 18 FT. BGS DPT GRAPHIC LOG DESCRIPTION SAMPLE SAMPLE DIAGRAM OVM USCS CODE ΙD ANALYSIS 30.0'-32.0' Clay, brown, 100% clay, plastic, moist, no odor, no stain. Total Depth = 32.0 feet Set well at 28' 15' 10-slot screen 13' PVC filter 8 bags 50# oglebny 12-25 salica sand 35 2 bags hole plug bentonite 1 end cap 3" 1 8"x12" surface well movement Polled up well and natural backfill of sand gravel at 28' set well at 28' 40 50-60 OB NUMBER: 1205

LOG

BORING NO.

CONSULTING

Page 1 of 1

WELL NO. SK-105

LOG

BORING NO.

CONSULTING

Page I of 2

WELL NO. SK-40

CLIENT: Safety-Kleen (Wichita), Inc. JOB NO.: 1205 PROJECT: RFI Phase II Investigation LOCATION: Wichita, Kansas DRILLED BY: EPS DRILLER: Steve Gensten METHOD: Geotechnical Service START DATE: 11-9-01 COMP. DATE: 11-9-01 SURF. EL.: 1313 TD: 35.0 FT. BGS LOGGED BY: Philip Cavendor MEAS. PT ELEV .: D. T. WATER: FT. BGS GRAPHIC LOG DPT SAMPLE SAMPLE DESCRIPTION DIAGRAM OVM USCS CODE ID ANALYSIS 0.0'-3.0' Clayey silt, dark brown to brown, 65% silt, 35% clay, low 0.0 plasticity, high strength, dry, no odor, no stain. CL/ML 3.0'-7.5' Lean clay, brown, medium plasticity, minor silt, no odor. no stain. 0.2 CL Lean clay, dark grayish brown, medium plasticity, medium strength, dry, no odor, no stain. 10 0.0 CL 14.0'-15.0' 3.1 CL Lean clay, dark grayish brown, medium plasticity, medium strength, dry, no odor, no stain. SM Silty sand, very dark gray, 65% sand (very fine to coarse), 5.0 35% silt, moist, no odor, no stain. SM Slity sand, very dark gray, 65% sand (very fine to coarse), 7.0 minor 3"-4" slit layers, no odor, no stain. 20-14.2 Poorly graded sand, very dark gray to yellow brown, very fine to coarse gravel, 25% sand, 65% silt, wet, no odor, SP no stain. Minor rounded to sub-rounded gravel (22mm). 24.0'-27.0' 25-Poorly graded gravel with sand, yellowish brown, 50% gravel 4.5 (very fine to medium), rounded to sub-rounded, 40% sand GP (very fine to very coarse), 10% silt, wet, no odor, no stain. Poorly graded sand, yellowish brown, 75% sand (very fine to 13.8 very coarse), rounded to sub-rounded, quartz and feldspar SP grains, 15% silt, wet, no odor, no stain. 30-OB NUMBER: 1205